



**JANUARY 1994**



**Using  
Amateur Radio In 1994**

**FCC Highlights \* ARRL Report \* VE Exams Schedule \* Public Service Report  
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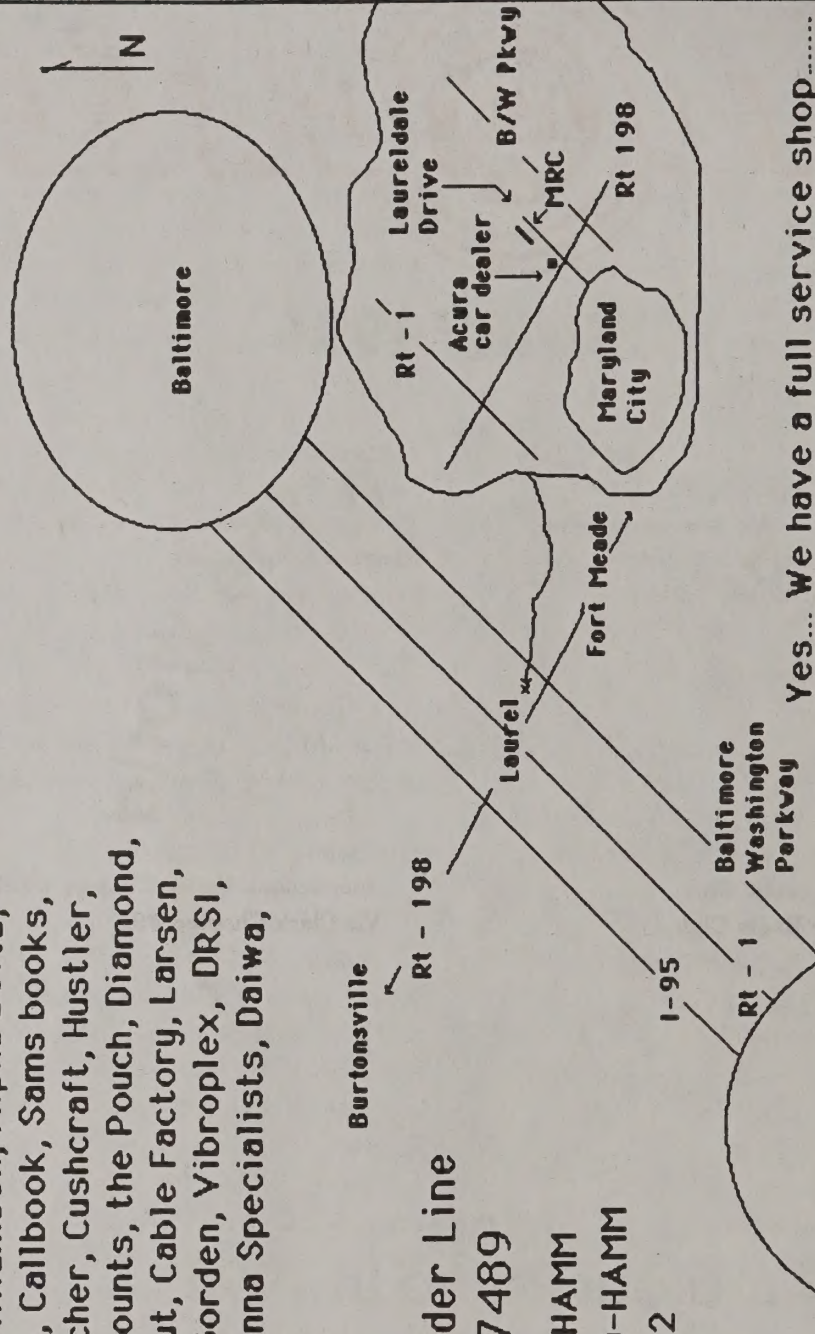
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# AUTO-CALL

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# COMING EVENTS

Jan 16	Richmond Frostfest
Jan 16	AMSAT Semi-Annual Meeting, Greenbelt, MD NASA/GODDARD Space Ctr.
Jan 19	B.A.R.C. Mini-Fest, Timonium, MD
Jan 23	Columbia Area Amateur Club Hamfest, Lancaster, PA
Jan 30	Maryland Moblieers ARC, Odenton, MD
Feb 20	Cumberland County Winter Hamfest, Camp Hill, PA
Feb 26	Appalacian Amateur Radio Club Group Hamfest, Lebannon, PA
Feb 27	Vienna Winterfest, Vienna, VA
Mar 12-13	Mecklenburg ARS, Charlotte, NC
Mar 13	York Springfest, York, PA
Mar 20	Two Rivers ARC, Monroeville, PA
Mar 26-27	Greater Baltimore Hamboree, Timonium, MD
Apr 3*	Chesapeake ARS, Virginia Beach, VA
Apr 4	Palm Sunday
Apr 11	Easter Sunday
Apr 11*	Penn-Del ARC Hamfest, New castle, DE
Apr 29-May 1	Dayton Hamvention, Dayton, OH
May 1*	Kent Island Hamfest, Grasonville, MD
May 8*	FAR/QCWA Annual Spring Banquet, Greenbelt, MD
May 8*	Roanoke Valley Hamfest, Vinton (Roanoke), VA
May 9*	Mother's Day
May 8-9*	Greenville, NC Hamfest
May 15	Warminister ARC, Wrightstown, PA
May 15	Armed Forced Day
May 20-22	Atlantic Div./N.Y. State Convention, Rochester, NY
May 22	Great Hagerstown, MD Hamfest
May 29	Maryland Fm Assoc. Hamfest, Howard Co. Fairgrounds, Howard Co., MD

*Thanks to Hugh Turnbull - W3ABC and Bob Milligan - KI4MB for providing much of the above information. Please send a copy of your Hamfest Flyer and Information to Auto-Call and keep us advised of any changes. We are anxious to provide our readers with timely information and help to avoid possible conflicts when scheduling activities.*

**WE NEED ALL TH WE CAN GET!**



## THE NEW GENERATION ROTATORS

### THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

Model/Specs	The New Generation									Old Generation	
	Create RCS	Create RCSA	Create RC5B	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FXL	Emoto 1300MAX	Emoto 1800FSX	Telex HamV	Telex TXZ
Rotors	43	118	160	37	50	57	143	215	287	67	83
Torque Ft/Lb											
CDR Right And. motor	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Br. Static Torque Ft/Lb	508	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (ft)	10	25	25	11	22	27	27	33	38	15	20
Mass mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Rev. Delay	None	2 sec	3 sec							None	None
Pre-set	Oct 3	Oct 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 20V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Max Dia	2-2.5 in	2-2.5 in	2-2.5 in	2-2.4 in	1.6-2.4 in	1.6-2.4 in	1.6-2.4 in	2.4-3.1 in	3.5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical max. load #	880	1540	1540	660	1100	680	1780	1760	2200	400	800
Water proof	13	17	20	7.5	9	11	11	13	39.5	24	28
Drive type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Special notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Pricing (US)	\$289.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$779.00	\$1099.00	\$272.00	\$69.95	\$39.95
Whn Priced	\$379.00	\$529.95				\$663.00					

\* Notes

1. Turn Torque 470 ft in 26 seconds

4. TXZ and HamV have same motor and gear train parts

5. 120V normal 220V special order

2. Variable speed 40 sec min

3. EEB prices as of 5/91 subject to change

6. Wind Load in Sq. Feet

3. Variable speed w/SCR constant rotational torque at any speed

6. 120/220 special Transformer

### THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

### CREATIVE DESIGN ROTATORS

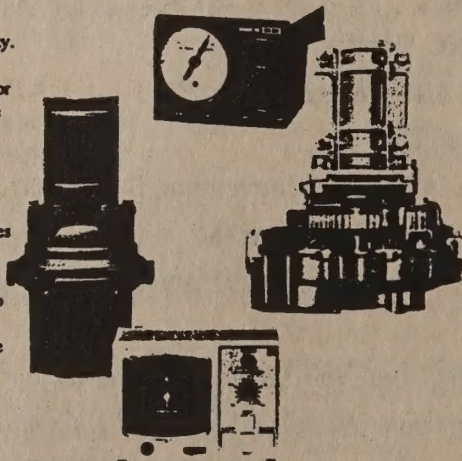
CREATE is serious about long term reliability. The CREATE RC5 series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

### ROTOR FEATURES OF RC5 SERIES

- Large strong reduction gear system provides long term reliability during years of rugged operation.
- Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions.
- Cast and machined aluminum case provide the strength required for long lasting service.
- Mast clamp guides for ease of mast installation.

### CONTROLLER FEATURES OF RC5 SERIES

- Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating speed is constant 60 to 200 seconds per 360 degrees.
- Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



### EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD<sup>2</sup> formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs = 1kg and length in meters 3.3ft = 1 meter. Calculate your GD<sup>2</sup> then compare EMOTO GD<sup>2</sup> spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)  
L: length of longest element (m)  
B: length of boom(m)

### GD<sup>2</sup> EXAMPLES: Kgm<sup>2</sup>

TH7DX (437), TH3JR (63), 205BA (675), DISC-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700DSX should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.

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# ANOTHER YEAR GONE !!!

To all of our subscribers and to all member clubs, thanks for your support of FAR in 1993. The Foundation had a great year and you made our 1993 F.A.R.Fest a great success. Those trustees who attended our meetings did a great job of keeping our great "Ship" under sail and in forward motion. one of our goals is to make our FAR scholarships self sustaining and we are well along in that process.

Now is the time to write '94 on the next 20 checks in your checkbook. It is usually February before I remember the correct year. Now is also the time to do all those things you wanted to do last year but couldn't get a "round tuit".

In my January, 1992 editorial I resolved to reach each member club, to get an affiliation update form completed. Well, that took until December, 1993. The moral is "do as I say, not as I do".

You should resolve to get to the 1994 "Spring Banquet" on Saturday, April 24. Mark that on your calendar. We always have a great time. Make sure your club is represented. The event is for "ALL" hams. (see the announcement in this issue and watch for more details in February)

Did you recognize deserving members of your club in 1993? Did you nominate anyone for FAR "Ham of the Month"? Be the spark that ignites recognition when it is due. Hundreds of hams work tirelessly and thanklessly in the name of their club and their hobby. My club president, Bob Israel (WC3I) sponsored me for recognition in 1993. I got to go to the Rochester, New York hamfest as their guest and, for me, it might as well have been Disneyland. So, do it! Honor those dedicated hams. It produces RECHARGE instead of BURN-OUT. Call me, (or write), for help or suggestions. As ARRL Club Coordinator for my state I see many newsletter references to club recognition, but not enough!

Finally, did you ever follow up on that resolution to clean up your ham shack????

**From the FAR Staff..... A VERY HAPPY NEW YEAR TO EACH OF YOU!**

Tony - WA3YLO

## 1994 ANNUAL SPRING BANQUET

**FOR ALL GREATER WASHINGTON AREA RADIO AMATEURS**

**SPONSORED BY LOCAL QCWA CHAPTERS, SOWP CHAPTER TEN,  
THE DEPARTMENT OF STATE ARC, AND THE  
FOUNDATION FOR AMATEUR RADIO**

**SATURDAY APRIL 23, 1994**

**RAMADA HOTEL, TYSONS CORNER, VIRGINIA  
(INTERSECTION OF ROUTE 7 AND 495 BELTWAY)**

**GOOD FOOD, GOOD FRIENDS, AND AN INTERNATIONALLY KNOWN SPEAKER**

**PUT THE DATE ON YOUR CALENDAR  
(DETAILS IN FUTURE ISSUES OF AUTO-CALL)**



# **American Radio Relay League Report**

by John Swafford, W4HU

## **Red Cross Enlists Hams in Illinois Flood Relief.**

By Dick Frey, K4XU

The 1993 ARRL Field Day operation was more than just our most successful ever. For members of the Western Illinois Amateur Radio Club, it was a warm-up for providing communications during the Great Flood of 1993.

Operating ARRL Field Day from the Quincy Mall, all of our public relations leads worked out and we had good interest from the local media, even though this was our third year at the same location.

But little did we suspect what was to begin the following weekend. The Mississippi River passed critical flood stage on July 3 and we were asked by the local Red Cross to provide communications for flood-related mass care three days later. On the 13th, the river crested at 32.12 feet, 15 feet above normal flood stage, and three feet higher than the previous record.

It was not until July 19 that we secured our disaster net control on the 147.03 repeater and cleaned out our communications center in the cafeteria of Quincy University, after two weeks of operation at 10 to 20 hours per day.

The WIARC, based in Quincy, Illinois, was in the center of the flood area on the east side of the Mississippi. The last major Mississippi River flood in this area was in 1973, and 20 years is too long in technology, personnel and memory to make many comparisons, so we learned as we went along.

But training does help: the club has several activities during the year where members can practice communications skills. We provide communications for two go-kart races, a 100 mile bicycle run, a footrace, and of course we do ARRL Field Day.

Thus, when the call came from the Red Cross to set up communications for their support of the levee workers, we felt we were ready, but it was still a learning experience for all concerned. The Red Cross has rules, the FCC has rules; Mother Nature does not.

Our communications network was set up as the affected area and number of people to be served grew. Providing food and water to as many as 4,500 workers out on the levees was a big job. Unlike most Amateur Radio operations, where the primary emphasis is on health and welfare traffic, we were needed to provide primarily tactical communications.

The Red Cross people were learning as they went along, too; just like the hams, theirs is a volunteer organization. Flexibility and a need for good people skills were the two biggest requirements for both groups.

A person can stay up two days, maybe even three, but after that if nobody else has been shown how to perform that person's function, it is lost until someone can be trained. For example, we had a food supply route handled by just one ham. When he failed to show up one morning after a week on the job, nobody else knew how to get to the places which he had served.

We found silence is the best indication of a properly functioning communications network. Less air time per message not only gets the messages through faster but also saves batteries. And pare down call sign use to the minimum required by law.

*Continued on page 9*



When message handling, discourage direct third party traffic as much as possible. Initially, some of the Red Cross volunteers wanted to talk directly to their headquarters. This led to some problems. After a demonstration, they were amazed at how a good operator could condense five minutes of conversation describing the required message into two or three short sentences of radio traffic.

Maintain the chain of command. Know who is the boss, and make no decisions beyond your own activity. We worked for the Red Cross, and we made it clear to the operators in each location who the local Red Cross boss was, and that he was to make all the decisions regarding disposition of their resources. This was especially true in the beginning, before we got used to the activity and understood the mission and the Red Cross rules.

Once we had been running for a few days and had gained respect for each other's abilities, things ran very smoothly.

There were several communications systems operating in our area. Each levee district had VHF communications with or without a repeater, and CB radios. The two county road crews had their VHF repeaters, and the City of Quincy had a VHF repeater. The National Guard had an array of HF and VHF gear, but no repeaters. They had a Huey helicopter which spent a lot of its time in the air keeping communications up to their units spread over 100 miles of river. There was also the cellular phone network.

Beware of duplicated communications! If you have been given the responsibility to provide the feedback to the food center to determine how many people need to be fed or what supplies they need, make sure the messages are not being duplicated through another route. It will destroy your credibility.

More than 35 operators participated in our operation. Getting operators during the week was a problem. School teachers and kids on summer vacation and retirees were the mainstay of the operator corps during the week. If this had happened in April, we would have been in serious trouble. The club-sponsored Novice classes paid big dividends.

Equipment really was the least of our troubles. The club's repeater on 147.03 performed flawlessly. Due to terrain, not everyone was able to hit the repeater all the time, and we could have used a few more 5/8 wave magnetic mounts. Some batteries failed and we often didn't have enough, but in general the gear held up well. Those who could not help directly made generous loans of their equipment: base rigs, power supplies, and antennas.

Personal vehicle use was kept to a minimum, partly because of the use of Red Cross Emergency Response Vehicles (ERVs) and partly because the Red Cross wanted to keep the number of vehicles on the limited roads in the area to a minimum, 5-watt handhelds and mag mounts were used in them.

When do you quit? We arbitrarily decided that when the remaining locations we were serving had telephone connections to the Red Cross center, it was time to go home. When we told the Red Cross of our decision, their reaction was "we knew that, but we wanted to let you tell us." That will go into the plan for next time.

**Support grows in Congress.** Joint Resolution continues to gain momentum from ARRL Letter.

97 members of the U.S. House of Representatives and 15 U.S. senators have become co-sponsors of The Amateur Radio Service Joint Resolution, which was introduced in the Senate on May 7 and in the House on May 20.

*Continued on next page*



At its January 1993 meeting the ARRL Board of Directors paved the way for the resolution, with a motion by New England Division Director Bill Burden, WB1BRE, that read: "VOTED that our Washington team is authorized to seek formal recognition by the 103rd Congress of the role played by the Amateur Radio Service as a national resource in preparation for and relief from disasters, and for technical progress in electronics."

The task now, as always, is to line up more co-sponsors for both S.J. Res. 90 (the Senate version) and H.J. Res. 199 (the House resolution), as quickly as possible, through a letter-writing campaign. Mail from constituents at home to senators and representatives is especially important to the passage of a joint resolution.

U.S. senators and representatives are listed in the U.S. Government section of local telephone directories.

Rep. Mike Kreidler (D-WA), an original co-sponsor of the House Resolution, lauded amateurs for their public service communications work, especially in natural disasters, saying in his introductory statement "It is about time for the Congress to recognize these achievements. With about 600,000 licensed amateur radio operators licensed in the United States along, I'm sure that every Member of the House has had similarly favorable experiences with the amateur community and will support this resolution."

#### **IARU Council Recommends Eased Cross-Border Licensing.**

The Administrative Council of the International Amateur Radio Union held its annual meeting in Brussels, Belgium September 26-27, 1993, following the IARU Region 1 conference that had been held in nearby during the previous week (see "Amateur Radio World" in November QST).

Among other actions, the Council encouraged IARU Regions 1 and 2 to continue their efforts to facilitate operation by amateurs visiting other countries without the need for additional licensing.

The Council also adopted resolutions requesting member societies to draw attention to their governmental administrations, where applicable, to the undesirability of imposing type approval and station inspection procedures on the Amateur and Amateur Satellite Service; reviewed and approved plans for Amateur Radio representation at upcoming conferences and meetings of the recently restructured International Telecommunication Union; and encouraged the promotion of the development of Amateur Radio worldwide.

The Council agreed to the renomination of incumbents Richard L. Baldwin, W1RU, as IARU president and Michael J. Owen, VK3KI, as vice president.

#### **ARRL Digital Conference Highlights Recent Progress.**

The 12th ARRL Digital Conference (known as the Computer Networking Conference in previous years) was held September 11 in Tampa, with about 50 interested amateurs in attendance.

ARRL's Jon Bloom, KE3Z, editor of QEX, observes in the upcoming issue that papers presented at the conference "represent what people are working on—or at least writing about—in amateur digital communications today. But do they represent what the amateur digital community would be working on?"

"The answer is yes," Bloom writes, "but only in part. Conspicuous by their absence are substantial developments or applications that don't relate directly to packet radio. Where is the work on digital voice and image communications and/or processing? Where are the advanced techniques for using digital modes under

*Continued on next page*



poor propagation conditions? Where, in short, are we going with digital communications in Amateur Radio?

"Packet radio as we amateurs practice it is almost 15 years old" (Jon says); "the Vancouver Area Digital Communications Group packet developments on which our developments are based were in 1979!

It's time — past time — to advance."

A Proceedings collection of the papers presented at the Conference is available for \$12 (plus \$3.50 shipping) from ARRL HQ.

### **Wire Service Reports Hams in Quake Relief.**

An Associated Press story following the recent earthquake in India lauded Amateur Radio operators for providing the only communications in remote areas. Here's how the New York Times ran it:

"In rural India, where the nearest working phone can be 25 miles away, amateur radio operators have cobbled together a communications network to help earthquake victims.

"Twenty-six ham radio operators have set up a network to help coordinate relief efforts for the 120,000 people left homeless by the earthquake on [September 30].

"The first thing we need after any calamity is communications, which are dismal in India," said Sirama Suri [VU2MY --ed] of the National Institute of Amateur Radio.

"In rural areas, the telephone system is primitive. From Killari, a village of 15,000 people that was leveled, the nearest long-distance phone line is 25 miles away in the town of Latur.

"Police radios in the villages have a short range and often do not work. Road between many villages are just dirt tracks for bullock carts.

"Using a makeshift network powered by truck batteries and stretches across several villages, the ham radio operators have been able to relay request from relief workers and refugee camps to Latur and Umerga, staging areas where thousands of tons of food, clothes and medicines are waiting."

### **Briefs.**

o In September the ARRL DXCC Desk received 1,330 applications (95,212 individual QSL cards) for endorsements and new DXCC awards, the largest number of QSLs received in a single month since September 1990.

o The Radio Society of Great Britain has picked 15-year-old Tim Munn, G7OTO, as its Young Amateur of the year. Tim has been interested in Amateur Radio since he was 10, the RSGB said. With the help of the Isle of Wight Radio Society and RSGB Senior Novice Instructor Alan Ash, G3PZB, Tim passed his Novice exam in January 1992 and his licensing exam a year later. He then started up a radio club in his school, becoming one of the youngest RSGB Novice instructors.

The RSGB said Tim's main interest is packet radio and construction (including an 80-meter receiver and a 50 MHz transmitter/receiver.

Runner up for honors was Simon Kahn, G0STU, who passed his licensing exam at age 11.



# FCC Highlights

By Jack Kelleher, W4ZC

## Retransmission of Emergency Broadcasts

FCC has denied a Petition for Rulemaking (from Ray J. Vaughan, KD4BBM, Miami Lakes, FL) seeking permission for amateur stations to retransmit emergency or warning communications originated by government or broadcast service stations.

The petition requested that Section 97.113(e) of the Commission's Rules be amended to permit the automatic or manual transmission of emergency or warning communications originated by federal, state or local government or broadcast stations, and the operational testing of such emergency communication systems on amateur service frequencies above 30 MHz. Vaughan's proposal envisions that "...this change would permit Amateurs to connect their repeaters and packet stations above 30 MHz to the same type of equipment that will be used for the next generation of EBS (Emergency Broadcast System) or to today's equipment. In the event of an emergency or a test of the system, retransmission of Government and broadcast stations will be permitted".

Robert H. McNamara, Chief of FCC Special Services Division, advised Vaughan that "...when normal communications systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur . . . an amateur station may make transmissions necessary to meet essential communications needs and facilitate relief actions. The rules also state that when a disaster disrupts normal communication systems in a particular area, the FCC Engineer-in-Charge in the area concerned may declare a temporary state of communication emergency and set forth any special conditions and special rules to be observed by stations during the communication emergency." (See Sec. 97.401-407).

Further, amateur stations are authorized to exchange emergency messages: (1) with a station in other FCC regulated Services (Sec. 97.111(a)(2); (2) U.S. Government stations necessary to providing communications in RACES, the Radio Amateur Civil Emergency Service (Sec. 97.111(a)(3) and (3) a station in a service not regulated by the FCC but approved by the FCC to communicate with amateur stations (Sec. 97.111(a)(4).

McNamara said the issue of retransmission of government broadcasts was also considered in 1989, when the FCC declined to authorize such retransmissions because these transmissions (presumably the emergency or warning transmissions originated by government or broadcast service stations) can be widely received using very affordable receivers. This is still true today, and therefore we can see no reason to allow the use of amateur service frequencies for additional retransmissions.

## Volunteer Examiner Irregularities

Another case of irregularities in the L.A. area is reported in the November 29 issue of the ARRL Letter (A previous case is covered in this column for June 1992, and February and April 1993). The ARRL Report says that the FCC has invalidated the licenses and license upgrades of 21 people after an investigation of irregularities at four volunteer examiner test sessions in southern California in June and August 1993.

*Continued on next page*



The sessions involved both the ARRL and W5YI VECs, and a number of volunteer examiners have had their accreditations suspended as a result.

The FCC thanked the VECs for their help in the investigation and lauded volunteer examiners for their hard work and dedication.

John B. Johnston, chief of the FCC's Personal Radio Branch, said in part "I'd like to commend ARRL-VEC for working together with W5YI-VEC to uncover irregularities at several recent sessions in the Los Angeles area and suspend the VEs involved. Your action will prevent future occurrences and assure that amateur licenses are granted only to those who are truly qualified. You've also sent a strong signal that ARRL-VEC is vigilant in its oversight to keep the volunteer testing system at the highest level of integrity.

### **Rules Amended Concerning 222-225 and 1240-1300 MHz Band**

On November 30, 1992 the FCC adopted a Notice of Proposed Rule Making proposing (1) to create a subband in the 222-225 MHz band where repeaters would be prohibited; (2) to authorize frequency privileges for Novice Class operators in the entire 222-225 MHz band, and (3) to allow Novice Class operators to be licensees and control operators of repeaters in the 222-225 MHz band as well as in the 1270-1295 segment of the 1240-1300 MHz band. On November 19, 1993 the Commission Adopted the proposed rules on establishment of a subband and authorization of privileges for Novices in the entire 222-225 MHz band, but declined to adopt the proposal relating to Novices as control operators and licensees of repeaters in either band.

The Commission considered carefully the comments for and against establishing a protected subband. They agreed with the ARRL that it is desirable that there be a uniform, nationwide subband where experimental operations can take place unaffected by repeater use. They concluded that the public interest would be served by establishing a protected subband at 222.00-222.15 MHz.

The proposal to expand the privileges of Novice Class operators by authorizing them the entire 222-225 MHz band met with a very favorable response from the commentators. There is general agreement that authorizing Novice Class operators additional frequency privileges will provide an opportunity for them to become proficient in a wider variety of amateur service operations. In addition, Novice Class operators will have more flexibility in selecting the mode of transmission that they want to use.

There was significant opposition to the Commission's proposal to permit Novice Class operators to serve as licensees and control operators of repeaters in the 222-225 and 1240-1300 MHz bands. In view of the lack of substantial support by the amateur community for granting Novice Class operators these additional privileges, the Commission decided not to amend the Rules in this respect. It was noted, in this connection, that the distinction between the Novice and Technician Classes would be diminished by granting Novices the proposed repeater privileges.

### **Testing Fee to be Raised in 1994**

The FCC announced in October that effective 1 January 1994 the maximum allowable reim-

*Continued on next page*



bursement fee for an amateur license examination will be \$5.75. This amount is based upon a 2.7% increase in the Department of Labor Consumer Price Index between September 1992 and September 1993.

Volunteer Examiners (VEs) and volunteer examiner coordinators (VECs) may charge examinees for out-of-pocket expenses incurred during preparing, processing, administering or coordinating examinations for amateur operator licenses. The amount of such reimbursement fee from any examinee for any one examination session, regardless of the number of elements administered, must not exceed the maximum allowable fee. Where the VEs and the VEC both desire reimbursement they jointly decide upon a fair distribution of the fee.

### **Petition for Packet at 6 meters**

Dr. John S. Burningham, WB8PUF, of Mahopac NY has filed a Petition for Rule Making seeking a rule change which will allow digital packet radio networking to operate on the 6-meter band. He contends that this will allow the further expansion of developing technologies to the benefit of the Amateur Radio Service.

### **EPA Critical of FCC RF Hazards Proposal**

In previous columns we have summarized progress on FCC actions to update its guidelines on effects of non-ionizing RF radiation to bring them into line with Standards issued in 1992 by ANSI (The American National Standards Institute) and IEEE (The Institute of Electrical and Electronics Engineers).

In comments filed with the FCC, the Director of the EPA Office of Radiation and Indoor Air said there are "serious flaws" in the new standard and that it contains unsupported claims. EPA is concerned as to whether the proposed standard is sufficiently protective of public health and safety. EPA recommended that radio amateurs be considered to be "members of the public", and thus apparently subject to more stringent RF exposure limits than persons who are exposed to RF as part of their jobs.

EPA's objections apparently stem from long-standing differences among investigators in this field, concerning thermal effects versus low-level, long-term non-thermal effects, and concerning the distinction between "controlled environments" and "non-controlled environments".

The EPA cites RF exposure recommendations from a different source; the National Council on Radiation Protection and Measurements, which recognizes that RF biological response may come from heating effects, non-heating effects, or a combination of the two.

Ed. — The effect of this new input will undoubtedly complicate the matter of issuing new guidelines; but differences of opinion in this field have existed for at least the past twenty years without a complete meeting of minds. The foreword of the current IEEE Standard in this area (IEEE C95.1-1991) gives a bit of history, viz:

"In 1960, the American Standards Association approved the initiation of the Radiation Hazards

*Continued on next page*



Standards project under the co-sponsorship of the Department of the Navy and the Institute of Electrical and Electronics Engineers.

"Prior to 1988, C95 standards were developed by an accredited standards committee C95, and submitted to ANSI' (The American National Standards Institute) 'for approval and issuance as ANSI C95 standards. Between 1988 and 1990, the committee was converted to Standards Coordinating Committee 28 under the sponsorship of the IEEE Standards Board. In accordance with policies of the IEEE, C95 standards will be issued and developed as IEEE standards, as well as being submitted to ANSI for recognition.

"The present scope of IEEE SCC28 is development of standards for the safe use of electromagnetic energy in the range of 0 Hz to 300 GHz relative to the potential hazards of exposure of man, volatile materials, and explosive devices to such energy. It is not intended to include infrared, visible, ultraviolet, or ionizing radiation. The committee will coordinate with other committees whose scopes are contiguous with SCC28".

### UP-COMING BARC GUEST SPEAKER PROGRAMS:

On JANUARY 5th, Bruce Packham will present a program on: **Matching An Antenna Using A Noise Bridge and Related Topics**. He will bring a receiver, noise bridge, and related paraphernalia and will measure some sample transmission line impedances and so on, by way of demonstration. He will offer his experience in matching his 80/40 meter antenna installation which required more than "cut the wire and pull it up" to install. He'll touch upon how some of the gadgets and gilhoolies work, the dreaded "j", and discuss some possible antenna related misconceptions just to liven things up a bit. I've heard this man speak before and personally, I plan on being there.

For FEBRUARY 16th, we have a genuine treat. Heru Walmsley, W3WVV, will speak to us and demonstrate: **ATV Transmission On 10 Gigahertz**. Yes folks, that's 10 very big ones! What's more, Heru promises that the RF equipment he will be using can be purchased commercially at a reasonable price for those who would like to get started in microwaves. No Klystrons or Lighthouse tubes in tuned cavities to bedevil those who lack a machine shop. W3WVV always takes an interesting technical journey and I'm ready for the trip. Anyone who has been to one of Heru's presentations knows that he is always very interesting and informative. Heru is one of the best presenters I know. He is not to be missed! Mark your calendar!

For more information and directions contact:  
Bruce Packham, W3UWV  
(410) 687-4945

*Editors Note: The above programs are of general interest to all Radio Amateurs and are packed full of good information. Anyone can attend. I recommend these programs for anyone who would like to further their knowledge of our hobby.*



# Elmer's Corner

By Paul Wilkins, AB4CY

## Where IS ground ?

It gets a little confusing talking about "ground". You have ground rods for earth ground, the third wire ground on AC receptacles for power ground, circuit ground, chassis ground, artificial ground, ground planes, etc.

A "ground" is defined as a reference potential of zero volts. Originally, although we have no idea what its real potential might be, the earth was established as the zero of potential. For safety reasons the third wire on AC line plugs and appliances is designed to provide a low resistance path to the earth ground so that an appliance case will be at the same potential as other "grounded" items like water faucets connected to metal pipes. This prevents a person from completing the current path between two conductors at different potentials. Hence the caution labels about proper "grounding" of electrical appliances. Many people were electrocuted by the old AC-DC table model radios when they reached over to tune them and accidentally touched the chassis while taking a bath !

The ground itself isn't necessarily a good conductor unless it is damp and has some minerals content to provide conducting ions to carry current. Ten miles of wire buried in the dry desert sand doesn't connect to anything. Ground rods in our locale are usually driven in four to six feet to get to a moist level. The resistive contact of the rod with the soil is not constant but varies with climate and season. Your house ground and the telephone ground are probably attached to the buried metal water pipe coming in from the street

When it comes to RF, finding ground is a little more tricky. If you have a long ground wire (say from a second floor window to the ground underneath) it may have considerable reactance at higher frequencies and in the worst case act like a high impedance and not accept current, so there is no RF ground. This can result in RF floating around the shack. An "artificial-ground" is created by making the ground lead series-resonant at the operating frequency. A series resonant circuit has no impedance for the RF, just the DC resistance of the wire. You literally "tune" the ground wire by adding an adequate inductance or capacitance in series with the ground lead to make it series resonant at the operating frequency. Black boxes to do this are available commercially.

Radials are buried at the base of a vertical antenna to create a good conducting "ground". A vertical works against an image of itself induced in the ground, and without a good ground the image suffers. In the case of elevated vertical antennas, a few radials are raised with the base of the antenna to form a "ground-plane" which substitutes for the "real" ground. Power is always lost in heating the ground when you use a buried radial system. For commercial broadcast antennas, the FCC requires a minimum of 90 radials at AM frequencies. Ground losses increase as the frequency is raised.

Inside a piece of equipment you have a ground buss and everything is connected or by-passed to it as the circuit or device zero reference potential. Sometimes the ground buss is the metal chassis itself. Without good bypassing, you can run into "ground loops" which are undesired circulating currents caused by voltage drops across unintended impedances in the circuitry due to poor "grounding". This used to be the bane of high-impedance tube-type equipment, causing feedback oscillations known as "motorboating" because of the audio effects they could create in a loudspeaker connected to an amplifier with a groundloop.

Computer and other digital circuitry operating with fast switching waveforms in the multi-Megahertz range are very carefully grounded because the rapid switching generates harmonics at very high frequencies where short lengths of printed circuit lead can become very high impedances or rf radiators.



# **PUBLIC INFORMATION COORDINATOR MARYLAND/DC SECTION**

Melvin J. Morenz N3EKZ  
416 Brooks Court  
Glen Burnie, MD 21060-7616

Voice: (410) 760-9426  
Packet: N3EKZ @ WB3V.MD.USA.NOAM

## **PUBLIC INFORMATION OFFICER APPOINTMENTS**

Congratulations are in order for the following individuals who have been selected by their respective clubs to fill the Public Information Officer appointment. These clubs and the Section Staff are confident that they will serve them and the public well.

Roger L. Davis, N3MIJ has been selected by The Laurel Amateur Radio Club as their new PIO. Roger has been an Amateur Radio Operator since May 1992 and currently holds a General Class license. He is an active member of the Laurel Amateur Radio Club and has a keen interest in promoting amateur Radio as a public service in the local community.

Sally Jo Cripe, N3MYZ was selected to be the PIO for The Antietam Radio Association. Sally holds a B.S. in Public Affairs from Indiana University. She was a Public Affairs Specialist while on active duty and has a keen interest in keeping the public informed of current events in the Hagerstown area.

Bernard Ostrofsky, W9IQ was selected by the Moose Amateur Radio Club to be their new PIO. Bernard is also a member of the Baltimore Radio Amateur Television Society and the Baltimore Amateur Radio Club, has assisted all of the clubs in some of their activities, and is interested in performing the PIO function for the Moose ARC.

If your club does not have an appointed Public Information Officer listed on their staff roster, ask any of your elected club officials for information on how you may become their representative. You may also ask any of the ARRL Section Leaders, give me a phone call, or drop me a message on packet and I will be more than happy to provide you with the information you need.

### **LAUREL RADIO CLUB CONDUCTS SPECIAL EVENT**

The Laurel Amateur Radio Club recently celebrated the 84th anniversary of the "worlds oldest continuously operated airport" by conducting radio operations at the College Park Airport located in College Park, Maryland. Although there are other airports that are older than the College Park airport, none have been in continuous operation as long as College Park.

College Park Airport began operations in 1909 when the Wright brothers brought their aeroplane to the College Park field to teach the first military officers to fly. It is also known as the "field of firsts", where many other first events occurred in aviation.

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The Laurel radio club special event consisted of around-the-clock radio operations at the airport, from noon on Saturday, 13 November to 4 p.m. on Sunday, 14 November. Club members set up two temporary stations, one in a camping trailer and the other in a RV motor home, and were able to contact 696 other amateur radio operators across the U.S., Canada and the Virgin Islands. Each ham radio operator contacted was offered the opportunity to receive a certificate from the club to commemorate the event and certify the radio contact.

Jim Cross, the Laurel club president, said "The number of amateur radio operators we were able to contact was outstanding. This was one of the best special events conducted by the club in recent years". Some of the other events have been conducted at the Laurel Main Street Festival, and the old Bollman truss bridge (a unique early engineering feat) in Savage, Maryland.

The Laurel Amateur Radio Club is a "Public Service" club which annually provides communications for local events, such as the Laurel Main Street Festival, the Beltsville Washington Birthday Marathon, and the Palotti cross-country invitational. Anyone interested in joining the club or learning how to become an amateur radio operator should contact Pud Reaver, at 301-498-6293.

### **SUGARLOAF MOUNTAIN SPECIAL EVENT STATION**

Hani Raad, AA3EI and Paulo Teixeira, N3MGA operated the special event packet station on Friday the 26th of November using Hani's callsign.

The purpose of this event was to revive the interest of keyboard QSO's in the MDC area, and to test the Packet mode of operation under field conditions.

The frequencies used were: 144.990 simplex, and 145.670 through DCA4. Voice coordination was on the 146.730+ repeater in Frederick and they also monitored the 145.450 MADRAS repeater in Rockville.

The equipment consisted of a Kantronics KPC-3 TNC, Kenwood TM-241A 2 meter radio, 170 watts RF Concepts RF 2-417 amplifier, Macintosh Powerbook 145 running Hostmaster 1.0 for Mac, and a 4 element 124WB Cushcraft beam antenna, all running from a 1KW power generator.

The event was great and ran smoothly. For those stations that participated in the event, claim your certificate by sending your QSL and a 9x12 inch SASE to Paulo Teixeira, N3MGA, 1204 G. St., NW, Washington DC 20005.

### **APRS FOOTBALL TRACKING SUCCESS**

On Friday, December 3rd, Bob Bruninga, WB4APR and a host of others conducted a Global Positioning Satellite (GPS) track of the football that was used during the Army vs Navy game on Saturday, December 4th, utilizing his Automatic Position Reporting System (APRS). The final outcome of the game, Army was successful in defeating Navy.

This year, there were three packet/GPS trackers attached to the chase vehicles for the run from Annapolis, MD to the Meadowlands outside of New York City. They were able to track the 1 watt, 2

*Continued on next page*



meter devices, over the full 250 miles! Volunteer packet stations all along the route left their TNC's on so that they could be used as digipeaters, and Austin Prestwood, Jr., W2HOB of Burlington, New Jersey, put up a temporary digipeater in southern New Jersey at 600 feet! Using only three hops, the 'once every 2 minute' position reports made it all along the route just fine.

**Lessons Learned:** Although the position reports were very reliable, APRS messages 'to the mobiles' often took 10's of minutes to be ACKed (if at all) towards the end of the route. This is the same reason that DIGI's are poor performers in normal packet, and one of the main reasons that APRS avoids CONNECTED packet and ACKs. (Bob is working on an improved message sending capability for APRS that tries to minimize the need for ACKs).

**Direction Finding:** With all the vehicles 100 miles out of Annapolis, a stuck transmitter in Baltimore jammed the frequency for 2 hours solid. Fortunately, position reports were still being digipeated forwarded through the network into New Jersey, and Richard Garcia, N2CZF of Brick, New Jersey was digipeating them out onto the 40 meter HF APRS net, so the reports still got through. All activity in Annapolis turned towards DFing. In minutes crossed bearing lines were obtained, but as more and more non APRS stations got involved, the bearings deteriorated. Later, it was found that some reports were given by apartment dwellers moving around in their apartments with HTs and providing information as to 'which corner of their rooms' gave the strongest signal! Although APRS plotted all these lines well, there was no real convergence. Although there was only one other APRS station on the map anywhere within 10 miles of the mess of lines, he was not at home. When he finally was reached several hours later, long after the signal had disappeared, he could find no evidence that it was his transmitter that was stuck. Any way, as soon as the signal quit, the position reports came rolling in and all was well.

**Others:** In addition to the GPS equipped chase vehicles, there were also two other APRS/GPS vehicles that joined the fun. William Jones III, N3JLQ of Havre De Grace, MD was automatic-GPS mobile and John Massie, N2MSM, of Mays Landing, New Jersey was manually entering his GPS position into his Porta-Packet TNC BText! Both stations hill-topped around the area of the entourage so that they could be used for digipeating to the big DIGI's. Also seen was the first cross-country APRS position from William Bliss, WB6LPG, of Half Moon Bay, in California. A total of 55 APRS stations were observed during the event and everyone involved had fun!

## **LAUREL VEC PROGRAM**

The Laurel VEC had a very successful year in 1993. At the national level, the Laurel VEC sponsored 94 test sessions. At the local level, the Laurel Amateur Radio Club conducted monthly test sessions at the Maryland Radio Center in Laurel, as well as additional test sessions throughout the year at several local hamfests, under the leadership of John Creel, WB3GXW.

Bob Busch, WB3KXJ, the Laurel VEC Records Administrator, reported that during 1993 the Laurel ARC conducted a total of 20 test sessions; 833 individuals were tested and 1,447 separate test elements were administered.



## And Then Came Rain !

Skywarn was activated by the National Weather Service (NWS) twice during November for severe storms. On November 11, 1993, an intense line of thunderstorms moved in an easterly direction across the Washington area. Net control was handled by NOAA, N0KYZ, KD4DGQ, KD4SRX, KC4OCG, KD4TNS, KD4TWR, K4FHK, and KB4IKU.

To welcome everyone home from Thanksgiving travels, on November 27, 1993 mother nature deluged the Washington area with up to eight inches of rain in a thirteen hour period which caused moderate flooding and isolated damage. Skywarn was activated at midnight on Saturday, November 27th and remained active until approximately 4:30 a.m. on Sunday morning, November 28th. Net control was handled by KC4YGB, N9EBJ, KD4DGO, K4FHK, KD4DGQ, and KD4SRX. During this activation the NWS issued a number of flood and severe thunderstorm warnings and tornado watches.

The ability of the Skywarn net to operate efficiently in the middle of the night, on a holiday weekend, should be a source of pride to all participants. once again, on behalf of the NWS, we would like to thank the entire Skywarn net for another job well done and the WA4TSC repeater group for use of the 147.300 Bluemont Repeater.

If the temperature had been colder, and this rain had been snow, it is likely that the snowfall amounts from the storm would have been measured in feet! Please take the time now to check your emergency preparedness materials in your home and car, including flashlights, alternate heat source, blankets, snacks, and of course battery powered amateur radios. It looks like we may be in for an interesting winter!

We are pleased to report that the Vienna wireless Society has loaned an ICOM 730 and all the other accessories necessary to run a first class HF station at the weather service to the Skywarn program. Plans have begun to create a permanent installation of the HF gear at the NWS. The Vienna Wireless Society is thanked for their support of the Skywarn system.

### SKYWARN TRAINING SCHEDULE

All classes will be held at the NWS in Sterling Virginia. Please call (703) 260-0107 between 8 and 5 during good weather to preregister and for further information.

#### Skywarn Basic I

January 15th	-	9 - 12
February 12th	-	1 - 4
February 24th	-	7 - 10

#### Skywarn Basic II

February 23rd	-	7 - 9:30
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#### Winter Storm

January 19th	-	7 - 9:30
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Dan, KC3OCG



# DX DX DX

By John Kanode, N4MM

## NEW START DATE FOR CW DXCC

The CW DXCC Award was created in 1974 and was made operational on January 1, 1975. The reason given for the January 1, 1975 start date was to promote CW operation, which, to some, was on a downhill trend. Also by starting on this date, it gave everyone an equal shot at the low numbered DXCC awards. The other DXCC's at the time had a November 15, 1945 start date. The CW DXCC was long overdue but unfortunately in its creation, certain facts and issues were overlooked or not considered. The new CW DXCC caused considerable unhappiness with some of the DX community. Some of the CW operators thought they had been had. Many had spent the past 30 years working DXCC, mostly on CW and now their effort was blown away. Some took it hard and dropped their interest in DXCC and quit the ARRL. In retrospect, it would have been more fair to start the whole DXCC program over and put everyone on an equal footing. Another way to handle the problem would have to have the start date as is and after two or three years, have it move back to the November 15, 1945 date. This would have been a compromise but would have been more acceptable by all concerned. Another flaw in the CW DXCC was the loose rules. No where did it say in the rules that the contacts had to be two-way CW. This loophole was taken advantage of by some who thought that getting to the top was more important than fair play and good operating practices. Many would catch the DX on SSB and ask them to listen for their CW and this also spread to the RTTY DXCC when it was started. This poor practice caused embarrassment to the DX stations and slowed up the QSO rates of the DX stations and caused some not to get any contact with the rare DX. Many DX stations would go QRT when asked to listen for CW and this made others on the frequency mad and fights broke out on the air. The last thing the Amateur Radio community needed was for someone to play a tape of these "on the air" fights at the upcoming WARC 79.

The loophole allowing these pseudo contacts to take place was eventually closed, but with much resistance by some of the abusers. Changing this rule to require two-way CW contacts is a sad story in itself.

Since this episode, all DXCC awards created after this have had November 15, 1945 start dates. About a year ago, the 5 Band DXCC had its start date moved back to November 15, 1945.

Now there is a move afoot to change the CW DXCC start date back to November 15, 1945. It is on the DXAC's agenda to be considered. Would changing this start date now do any good? All DXCC Countries have been active since January 1, 1975. If you have been active in the DX program since then, you should have worked them. Moving the start date back now would not fix much and it would create new problems, especially with the top overall listings. If the date is moved backed to November 15, 1945, old timers will go into shoe boxes looking for old deleted country QSL's to submit in order to raise their overall totals. This would be an unfair advantage to those who have worked hard since 1975.

If you have any input on this subject, your DXAC Rep. or your ARRL Director would like to hear from you.

*Continued on next page*



## APPROVED OPERATIONS

Call	Operation beginning
9G1XA	23 August 1993
9H3RU	9 August 1993
BV/K4IQJ	19 May 1993
C21/KC6DX	7 September 1993
C21/KC6ZM	7 September 1993
CY9/WV2B	9 July 1993
CY9/W8UJH	9 July 1993
CY9R	2 September 1993
ET3RP	20 September 1993
JT1/JE7RJZ	5 January 1993
JT/JE7RJZ	19 August 1993
SV5/N6MZ	16 June 1993
T5/N3HQQ	31 August 1993
UA0S/JE7RJZ	28 October 1991
UA0S/JM1SVJ	28 October 1991
UA0S/JJ2HVK	28 October 1991
UA0S/JK2NBE	28 October 1991
VS6/K4IQJ	27 May 1991
ZB2/DL7URA	6 April 1993
ZB2/DL7VEE	5 April 1993

## UPCOMING DXPEDITIONS

Tonga	A35	December 93, January 94
Peter 1 Island	3Y	February 1994
Cook Islands	ZK1AJM	December 31-January 2
Western Samoa	5W1AS	January 2-5

## UPCOMING DX CONTESTS

AGCW-DL QRP Winter Contest	January 1-2
ARRL RTTY Roundup	January 8-9
HA DX Contest	January 15-16
CQ WW 160 Meter Contest	January 28-30

## TIDBITS

New Brunswick (VE1) amateurs may use the VE9 prefix beginning December 1, 1993 and new licenses in the province will be VE9's.

*Continued on next page*



Move "SLIM" operations, D68AA, JT7AA and JT8AA.

French Callsign Changes;

FCIxxx becomes F1xxx

FDIxxx and FEIxxx becomes F5xxx all HF privileges

FE2, 3,5,6 and no change, but the E is voluntary

TK3 becomes TK1 and TK4 becomes TK5

FG, FMFR, etc. 3x becomes 1x. 4x becomes 5x, 5x no change

FF5xx, FF6xx and FF9xx becomes F5Kxx, F6Kxx or F8KxN Clubs.

The 1994 Peter I DXpedition is on schedule with equipment on the way to the Falkland Is. 10 operators will be on all hands and made for 16 days. The team is still looking for a good CW operator who can commit the time (6-9 weeks) and funds (\$10,000). Contact Ralph Fedor, K0IR, team leader for details. This DXpedition is due to take place in February 1994. This country is the No.1 on most DXers most wanted list. The pile ups will be huge.

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# FOUNDATION FOR AMATEUR RADIO

## VOLUNTEER EXAMINER COOPERATIVE

NEW ADDRESS

JOHN FORREST WZ4A

NEW ADDRESS

6111 BURNETT ST.  
ALEXANDRIA, VA, 223  
(703)971-3905

### NOTICES:

- \* EFFECTIVE JULY 1, 1993, NOVICE EXAMS MAY ONLY BE ADMINISTERED AT A VEC SESSION. THE PRIOR PROCEDURE OF ADMINISTRATION BY 2 GENERAL CLASS OR HIGHER AMATEURS HAS BEEN ABOLISHED.
- \* EFFECTIVE JULY 1, 1993, THE NOVICE AND TECHNICIAN WRITTEN QUESTION POOLS (ELEMENTS 2 AND 3A) HAVE BEEN CHANGED. EXAMS ADMINISTERED AFTER THAT DATE MUST USE THE NEW QUESTION POOLS.

## SCHEDULE OF EXAMINATIONS

1994

### JANUARY 2, 1994 (SUNDAY)

D.C.M. ARC (LANDOVER, MD)(ARRL VEC) WALK-IN  
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)  
(301)773-2898 (EVENING)

### JANUARY 8, 1994 (SATURDAY)

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)  
WALK-IN  
CONTACT: NANCY ALLEY NT3Z (410)761-7115  
BOB ISRAEL WC3I (301)262-5083

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN  
CONTACT: FRANK MACKEY N4GUS (703)455-1510

DEPARTMENT OF STATE/GWU ARCS (WASHINGTON, DC)(ARRL VEC)  
WALK-IN  
CONTACT: DERRILL ROHLFS W3WOX (202)994-5509 (DAY)  
(301)423-0179 (EVENING)

*Continued on next page*



**JANUARY 15, 1994 (SATURDAY)**

LAUREL ARC (LAUREL, MD)(LAUREL VEC)  
PRE-REGISTRATION DESIRABLE  
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

**JANUARY 30, 1994 (SUNDAY)**

ANTIETAM RADIO ASSN ARC (HAGERSTOWN, MD)(ARRL VEC)  
PRE-REGISTRATION REQUESTED  
CONTACT: PAGE PYNE WA3EOP (301)714-0688 (DAY)  
BOB LONG KD3JK (301)824-5132 (EVENING)

**FEBRUARY 5, 1994 (SATURDAY)**

HERNDON REPEATER GROUP (HERNDON, VA)(ARRL VEC) WALK-IN  
CONTACT: MIKE WEBER WB8RDN (703)450-2304 BETWEEN 7-9 PM

**FEBRUARY 6, 1994 (SUNDAY)**

D.C.M. ARC (LANDOVER, MD)(W5YI VEC) WALK-IN  
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)  
(301)773-2898 (EVENING)

**FEBRUARY 12, 1994 (SATURDAY)**

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)  
WALK-IN  
CONTACT: NANCY ALLEY NT3Z (410)761-7115  
BOB ISRAEL WC3I (301)262-5083

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN  
CONTACT: FRANK MACKEY N4GUS (703)455-1510

**FEBRUARY 19, 1994 (SATURDAY)**

LAUREL ARC (LAUREL, MD)(LAUREL VEC)  
PRE-REGISTRATION DESIRABLE  
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

*Continued on next page*



**MARCH 6, 1994 (SUNDAY)**

D.C.M. ARC (LANDOVER, MD)(ARRL VEC) WALK-IN  
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)  
(301)773-2898 (EVENING)

**MARCH 12, 1994 (SATURDAY)**

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)  
WALK-IN  
CONTACT: NANCY ALLEY NT3Z (410)761-7115  
BOB ISRAEL WC3I (301)262-5083

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN  
CONTACT: FRANK MACKEY N4GUS (703)455-1510

**EXAM FEES:**

- \* CHECK FOR APPROPRIATE EXAM FEE. FEES AND MODES OF PAYMENT FOR INDIVIDUAL VECs AND EXAM TEAMS MAY VARY.
- \* ARRL VEC EXAMS COST \$5.60
- \* LAUREL VEC EXAMS ARE FREE
- \* MOUNTAIN VEC EXAMS ARE FREE
- \* W5YI VEC EXAMS COST \$5.60

**BRING TO EXAM:**

- \* PICTURE IDENTIFICATION
- \* COMPLETED FCC FORM 610 (MOST VE TEAMS WILL SUPPLY AT EXAM)
- \* ORIGINAL AND A COPY OF CURRENT FCC AMATEUR RADIO LICENSE
- \* ORIGINALS AND COPIES OF ALL ACTIVE CERTIFICATES OF SUCCESSFUL COMPLETION OF PRIOR EXAMS
- \* EXAM FEE (CHECK OR CASH DEPENDING ON VE TEAM)

**"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):**

- \* IF YOU PRESENTLY HOLD A TECHNICIAN CLASS LICENSE WHICH WAS FIRST ISSUED PRIOR TO MARCH 21, 1987, YOU MAY BE GRANDFATHERED FOR ELEMENT 3B (GENERAL CLASS WRITTEN EXAM) BY PRESENTING THE ORIGINAL AND A COPY OF THE LICENSE DATED PRIOR TO MARCH 21, 1987 TO THE VE TEAM. IT IS YOUR RESPONSIBILITY TO PROVE THAT YOU ARE ENTITLED TO GRANDFATHERING. DO NOT LOSE YOUR ORIGINAL LICENSE!

**RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:**

1. ALL SUBMISSIONS MUST BE IN WRITING
2. DATE AND DAY OF WEEK MUST BE SPECIFIED FOR EACH EXAM DATE
3. POINT OF CONTACT AND PHONE NUMBER MUST BE SPECIFIED
4. SPONSOR AND LOCATION MUST BE SPECIFIED
5. VEC MUST BE SPECIFIED
6. EXAM DATES UP TO 12 MONTHS IN ADVANCE WILL BE ACCEPTED



# Training Classes

## General Information

Alexandria Radio Club .....	Rich Adams - KA3GFY .....	(703) 644-3920
Anne Arundel Radio Club .....	Tony Young - WA3YLO .....	(301) 262-1917
Arlington Amateur Radio Club .....	Fred Bardsley - WD4DHW .....	(703) 533-0372
Antietam Radio Association .....	Robert Long - KD3JK .....	(301) 824-5132
Baltimore Radio Amateur TV Society .....	Joe Chidester - W3SHZ .....	(410) 602-0353
Fauquier Amateur Radio Club .....	Neil Spokes - AB4YK .....	(703) 364-3861
Frederick Amateur Radio Club .....	Steve Bauman - W3FOA .....	(301) 662-4552
Herndon Repeater Group .....	Michael Weber - WB8RDN .....	(703) 450-2304
Laurel Amateur Radio Club .....	Pud Reaver - W3DQI .....	(301) 498-6293
MADRAS .....	Larry Ziecheck - N3GKS .....	(301) 984-6112
Maryland Mobileers ARC .....	John Baugus - N3JME .....	(301) 551-3161
Montgomery Amateur Radio Club .....	Jane Rosenthal - AA3CQ .....	(301) 762-6262
Mount Vernon Amateur Radio Club .....	John Forrest - WZ4A .....	(703) 971-3905
NASA/Goddard ARC .....	Vikki Gigante - KA3PVS .....	(301) 249-2609
Ole Virginia Hams ARC .....	John Fritsch - N4YOB .....	(703) 791-5995
Pentagon Amateur Radio Club .....	David Boyd - K9MX .....	(703) 659-6241
Rock Creek Amateur Radio Assn. ....	Walt Ramsey - AK3B .....	(301) 949-3954
St. Mary's County ARC .....		(301) 862-2214
Shenandoah Valley ARC .....	Dale Streyle - N2IKY .....	(703) 888-8427
Southern Maryland ARC .....	Vic Curtis - WA3YUV .....	(301) 888-1388
Southern Patuxent ARC .....	Dwayne Kincaid - WD8OYG .....	(301) 586-2177
Springfield Estates ARC .....	Will Schmitt - KD4CNX .....	(703) 768-5709
Stafford Adult Education .....	Jerry Mullinix - AC4HK .....	(703) 659-3905
Sterling Park ARC .....	Mark Johnson - WS3N .....	(703) 430-3804
Tri-County Amateur Radio Club .....	John Creel - WB3GXW .....	(301) 572-5124
Vienna Wireless Society .....	Paul Wilkins - AB4CY .....	(703) 560-2779
Woodbridge Wireless, Inc. ....	Loyd Davis - K8EI .....	(703) 360-0248

## FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month.

**Visitors are always welcome**

The next meeting will be January 12, 1994 at the  
Lee Center, Alexandria, Virginia

Take Capitol Beltway to Exit 1 (US 1 North)

North to the second traffic light, Left on Gibbon Street to Fayette

Left on Fayette to dead end at Lee Center parking lot

Talk-in on 146.55



# ANNOUNCING THE VIENNA WIRELESS SOCIETY WINTERFEST® 1994



SHUTTLE BUS

RAIN SNOW OR SHINE  
**SUNDAY, FEBRUARY 27th**

**7:30 AM**

AT THE

**VIENNA COMMUNITY CENTER**

**120 Cherry Street  
Vienna, VA**

SNACKS—DRINKS  
FOOD SERVICE

**GENERAL ADMISSION**

**\$5.00 PER TICKET**

**XYL, UNDER 12 FREE**

**ALL YOUTH IN UNIFORM ADMITTED FREE**

**VEC EXAM 9AM  
SATURDAY  
FEBRUARY 26th**

**FROSTBITE  
TAILGATING**

**\$10 PER SPACE • OPEN 6 AM  
FIRST COME • FIRST SERVED**

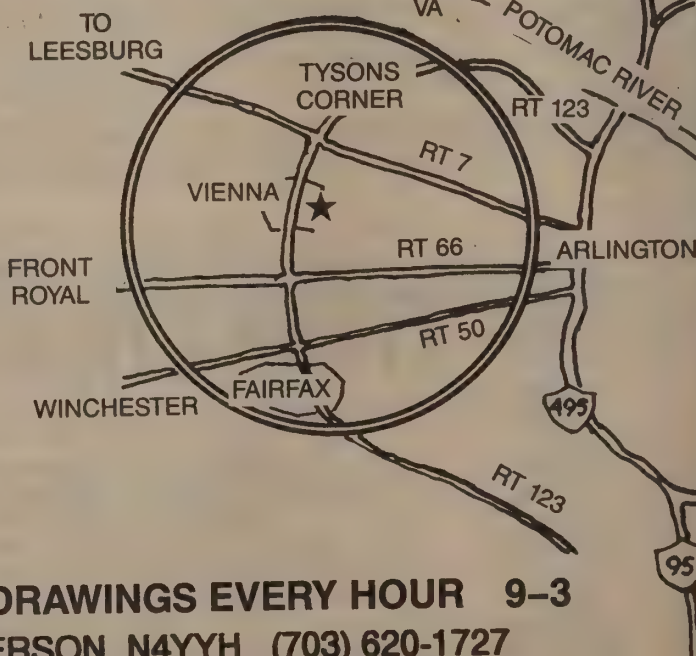
**SHUTTLE BUS FROM  
VIENNA METRO KISS & RIDE**

**7:30 AM-2:30 PM**

**TALK IN K4HTA/R**

146.085in	146.685out
146.190in	146.790out

**ORIGINAL DXCC  
FIELD CHECKING**



**USUAL AMENITIES      DRAWINGS EVERY HOUR      9-3**

**FOR INFO ... ROSS PATTERSON N4YYH (703) 620-1727**

**FOR TABLE INFO....DICK BARTO KD4DGV (703)385-0601**

**AN ARRL SANCTIONED HAMFEST**



# **ANNOUNCING THE 1994 B.A.R.C. "IT'S FREE" MINI-FEST**

**WEDNESDAY, JANUARY 19<sup>th</sup>  
MARYLAND STATE FAIRGROUNDS EXHIBITION HALL  
TIMONIUM, MARYLAND**

**ADMISSION IS FREE! • TABLES ARE FREE!  
FOR THE ENJOYMENT OF THE AMATEUR COMMUNITY**

**SPONSORED BY:  
THE BALTIMORE AMATEUR RADIO CLUB, INC.  
DOORS OPEN AT 5 PM, RUNS 'TIL 10 PM**

**DON'T WAIT 'TIL SPRING  
COME TO THE B.A.R.C. "IT'S FREE" MINI-FEST  
OUR ANNUAL MID-WINTER INDOOR  
AMATEUR RADIO AND ELECTRONIC  
FLEA MARKET AT THE FAIRGROUNDS  
THE BEST BARGAIN OF THE YEAR!**



APPROVED



TALK IN  
148.67-  
224.24-  
449.625-  
PL 107.2

**EVERYONE IS WELCOME  
NO RESERVATIONS ARE NEEDED  
FIRST COME, FIRST SERVED  
BRING YOUR STUFF, JUST SET UP A TABLE,  
PUT IT AWAY WHEN YOU'RE DONE  
CLEAN UP YOUR TRASH  
THAT'S ALL THERE IS TO IT!  
FOR MORE INFORMATION: DON'T WRITE,  
JUST DIAL : 410-HAM-FEST**



# MARYLAND MOBILEERS AMATEUR RADIO CLUB, INC.



## POST HOLIDAY SWAPFEST AND FLEAMARKET



**SUNDAY JANUARY 30, 1994**  
**8 A.M. Till 2 P.M.**

**Odenton Vol. Fire Dept. Hall**  
**1425 Annapolis Road (Rt. 175)**  
**Odenton, Maryland**

*(Located on Route 175, 9 Miles East of I-95)*

**\$3.00 Donation at the Door**

### ***FEATURES:***

✓ **INDOOR FLEA MARKET**

(NO TAILGATING)

✓ **FREE PARKING**

✓ **V.E.C. TESTING**

(ADVANCED REGISTRATION REQUESTED)

✓ **TALK-IN ON 146.205/805**

✓ **REFRESHMENTS AVAILABLE**

**FOR GENERAL INFORMATION/TABLE RESERVATIONS CONTACT:**

**Tom, KA3OMU at (410) 969-2639 (Evenings)**

**or mail a donation of \$5.00 (covers Table and one operator) make check payable to:**

**MMARC Inc., P.O. Box 935, Severn, MD 21144**

**DEADLINE FOR MAIL IN RESERVATIONS IS 1/10/94**

**FOR V.E. TESTING INFORMATION AND REGISTRATION CONTACT:**

**Jerry, NU3D, at (410) 761-1423 (Anytime)**



## Mount Vernon Amateur Radio Club

- \* Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308
- \* Repeater: WD4PDP/R 146.055 input 146.655 output
- \* Nets: Every Tuesday at 9:00 p.m. Starts on 2-meter then moves to 10-meter on 28.405
- \* Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466
- \* Training Classes: John Forrest WZ4A, (703) 971-3905
- \* Testing: Second Saturday of each month, 9:00 a.m. Robert E. Lee RECenter in Lee District Park 6601 Telegraph Rd., Alexandria, VA 22310
- \* Mailing Address: Mt. Vernon Amateur Radio Club (MVARC) c/o Frank Mackey N4GUS, P.O. BOX 7234, Alexandria, VA 22307

Welcome 1994 and may it be a most prosperous and healthy new year!

To wind down 1993, MVARC enjoyed its annual Christmas Party and party we did, which we do so well. Continuous food of choice, laughter, grab bag, and entertainment by some of MVARC's finest minstrels (Steve WB4EEA, Glenn KR4AT, Frank AA4ZS, Bruce KB4EBK, and Lynn AC4SM. Party participants were attired in their holiday finery. You weren't there? Start planning now for December 1994.

The fall classes have produced several new/ or upgraded licensed HAMS. Welcome and congratulations to Chris McDonald (coded tech), Tom Fuller (coded tech), and Luis "Ed" Souza (5wpm certificate). And welcome as new members of MVARC.

Ted Cohen, K4XX, spoke at the November meeting about propagation and offered a copy of his book as a door prize to MVARC. The winner is..... Eoin O'Donoghue, KD4YEQ.

Also:

Classes will start January 24, 1994, Monday evenings, 7:30-9:30 pm. for FCC General, Advanced and Extra, and code. Call John Forrest WZ4A (703) 971-3905.

MVARC Apparel Purchases: hats, tee shirts, sweat shirts, jackets, etc. Call Steve WB4EEA (703) 780-7248.

Monthly Testing, code and written, is at Lee District Park in Alexandria, second Saturday of every month. No charge and walk-ins are welcome. Information is available by calling Frank N4GUS at (703) 455-1510. Also, call Frank if you are interested in being a VE or helping at the exams. You don't have to be a VE to help out and the more the merrier. Please arrive between 9 and 10 a.m. for testing.

MVARC will be transmitting from the Mount Vernon Estate the weekend of February 19th and 20th, 1994. Perhaps George and Martha will get in the spirit and join the fun. Call Steve WB4EEA (703) 780-7248.

**MVARC's Next Meeting: January 13, 1994.**

Julie, KD4WSZ

### UPGRADE LICENSE COURSE

The Mount Vernon Amateur Radio Club will present an upgrade license course covering the General and Advanced Class Licenses.

The class may be extended to include the Extra Class License (Including 20 WPM CW) if enough students express interest. Classes will be held in Alexandria, VA on Monday evenings from 7:30 to 9:30 PM STARTING 24 JANUARY 1994 and will run for about 17 weeks. There is no charge for the class; however, students will be expected to supply their own ARRL License Manuals and CW study Materials. For Information and Location

Contact: John Forest, WZ4A  
(703) 971-3905



## Herndon Repeater Group

- \* Meetings: On-the-air meetings every Monday at 9:00 p.m.
- \* Repeater: N4FSC/R 144.71/145.31 MHz
- \* Packet BBS: 145.03 MHz (BBSHRG)
- \* Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070
- \* Training: Michael Weber-WB8RDN (703) 450-2304
- \* Information: Michael Rosati-N4FXP (703) 481-8380

**RAFFLE/HOLIDAY PARTY:** The 1993 HRG Holiday Party was held on December 11 at the St. Matthew's Episcopal Church in Sterling. Thanks to George KR4CV for obtaining the facility. The highlight of the evening was the 2nd annual HRG rattle with a Yaesu FT-530 dual band handheld as the Grand Prize. Specifies details and a photograph of the Grand Prize winner will be listed here next month.

### FIELD DAY WINNER:

For the second year in a row, HRG won the 4A Battery category at Field Day under the callsign KI4RO. An typo appeared in the November QST relating to the callsign used by HRG but the score was correct. Thanks to HRG FD Chairman Bill N4WJN for all his effort on this initiative. Bill is looking for an HRG member to take over the co-ordination effort for FD 94. Contact Bill N4WJN for details.

**GENERAL CLASS:** Pending enough HRG Instructor's volunteer by 15 January (so far, Tom WB8ZRP and Mark KR4FH have volunteered to teach), HRG will offer its third annual free General class (code and theory) every other Saturday beginning February 19 running 6 weeks. Following the class will be an exam session on May 14, 1994. The class will be limited to the first 25 People who register so contact Mike WB8RDN if interested as soon as possible. There must be 20 students registered by 1 February for the, class to be conducted.

**EXAMS:** The next HRG ARRL/VEC exam session will be February 5, 1994 in Sterling. Contact Mike WB8RDN for details.

**DINNER:** HRG members met for dinner on November 14 at the Herndon Fudruckers Restaurant. Over 60 HRG members and visitors attended. Thanks to Tom WB8ZRP for coordinating this effort.

**NET:** HRG holds it weekly Net meeting every Monday evening at 9PM on the 145.31 Mhz N4FSC Repeater in Herndon.

**PUBLIC SERVICE:** HRG received a nice letter from Mary and Dave Wilson of Burke, VA thanking Gary Rinker KD4SRX for his assistance in helping them when their car broke down on Rt. 7 several weekends ago. Good job Gary!

**CLASS PHOTO:** As promised, here is the 1993 HRG Novice/Technician Course group photo showing about half of the students and a few of the Volunteer Instructors.



*Some of the 1993 Herndon Repeater Group Novice/Tech. Class.*

*Herndon - Continued on next page*



## Southern Patuxent Amateur Radio Club

- ✦ Meetings: 2nd Wednesday of each month at 7:00 p.m., Southern Community Center, Lusby MD
- ✦ Nets: 28.410 Thursdays 8:30 p.m. 147.195 Tuesdays 8:30 p.m.
- ✦ Repeaters: W3ZNW 146.985- Sunderland N3JTG 147.195+ Leonardtown N3JTO 146.745- California, Autopatch for members KA3ZYG 449.225- Leonardtown N3AGB 443.30+ St. Leonard, Autopatch for members
- ✦ Address: PO Box 399, St. Leonard, MD 20685
- ✦ Information: Steve Franc 301-373-3605, Dwayne Kincaid 410-586-2177

The Fall class has just been completed with nearly 20 graduates completing the class. The Southern Patuxent VE team gave 68 exams in the past month to coincide with the graduation dates. Receiving a Novice license was Clayton Martin, Jesse Daniel Vriese and Nathaniel Vriese. Receiving Tech were Anne Marie Martin, Richard Nueslein, Leslie Couchenour and Randall Gawthrop. Receiving Tech Plus were Miriam Mahoney, Robert Harned, Mark Dudley, William Isenberg, John Breitmaier and John Vriese. Upgrading to General was Glenn Thorn / N3PNL and Craig Kinman / KA3ZZG. Several more passed elements, but did not receive licenses. VEs participating were Steve Franc / AA3AN, Gene Tehansky/ AA3AV, Warren Dean / KW3N and Dwayne Kincaid/ WD80YG.

The 147.195 repeater in Leonardtown received several upgrades in the past months. The first being an added remote receiver on a 150 foot tower just south of Lexington Park. Now with three receiver sites, the repeater has 100% mobile coverage of St. Mary's county. Another remote receiver is planned for the Northern part of the county sometime in 1994 to give complete hand held coverage.

The repeater also added a 150 watt amplifier

recently to keep the transmitter coverage up with the remote receivers. The amplifier now gives the repeater an output of 400 watts effective.

Gene Talley / N3JTO and SPARC has teamed up to install another 2 meter repeater in St. Mary's county. The new 146.745 repeater will also feature remote receivers to the North and South and a 400 number autodialer with a St. Mary's county phone patch for SPARC members. The repeater was approved at the November SPARC meeting and will be fully operational by March of this year.

Gene Tehansky / AA3AV has formed a group of RTTY enthusiasts on 10 meters. The group meet regularly on 28.195 and have an invitational check in on Thursday nights at 8:00 local. The group has found that having roundtable discussions using RTTY on 10 meters is a perfect alternative to packet keyboard to keyboard operations on 2 meters.

*SPARC - Continued on next page*

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*Herndon - Continued from page 32*

**VOLUNTEERS NEEDED:** HRG is seeking members who would like to tackle the following two assignments: Coordination of the bimonthly Technical Seminars and Adult coordinator for the weekly HRG Youth Net. If interested, contact Mike N4FXP at the number listed above for complete details.

**MY LAST AUTOCALL COLUMN:** As 1993 comes to a close, I have decided this will be my last Autocall column on behalf of the Herndon Repeater Group. Having written it for just under 3 years, I am turning it over Mike KD4MTW who has volunteered to continue the effort. Thanks to Mike for offering to assist in this manner. HRG members with news are urged to contact Mike KD4MTW directly to have it listed in Autocall. Happy Holidays!

73 Mike WB8RDN



## Carroll County Amateur Radio Club, Inc.

- \* Meetings: 2nd Monday at 7:30 pm, Carroll County E.O.C. Washington Road (Rte 32) 1 mile north of route 97, Westminster, MD.
- \* Repeaters: 145.41 MHz, 449.875 MHz
- \* Mail: CCARC, Inc., P.O. Box 2099, Westminster, MD 21158
- \* BBS: K3PZN, 145.03 MHz

Hello everyone. The CCARC has been a very active organization this year. Most of the activities were from our ARES/RACES group known as the CARET, Carroll Amateur Radio Emergency Team.

What follows is a recap of the year, 1993, in somewhat a chrono-logical order.

The Club prepares plans to put together a 6 Meter repeater.

Blizzard '93 — The Carroll Amateur Radio Emergency Team (CARET) net was activated to provide Carroll County weather information to the National Weather Service by way of the Skywarn system.

Doug Bumstead - N3CWG E.C. Carroll County; Rich Suvall - N3JIA A.E.C.; and Andy Leeds - N3MCB, provided continuous net monitoring through out the period that Skywarn was activated. Net operations were on the 145.41 MHz repeater at Westminster, with a secondary net established on 28.340 MHz.

In March, the CARET provided communications for the MS-Walk held in Westminster.

*Continued on next page*

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### **SPARC - Continued from page 33**

SPARC has also teamed up with Phil Lane/KB3AXF and Randy Norris / N3PNJ to set up an impressive BBS and packet node in Southern Maryland. The N3PNJ-1 Node was brought on the air

in November on 145.71 Mhz from the Emergency Operations Center in Leonardtown. Phil, who has worked with telephone based BBSs in the past, is on line with over 600 Megabytes of hard disk space and access to a CD ROM. The BBS has also hooked up with the Ham Files Distribution Network and is connected to several message services. The BBS is also accessible by phone at 301-737-0116, 24 hours a day using 1200 to 14,400 baud.

Several Fox Hunts have taken place in recent months in Southern Maryland with growing interest, including avid Fox Hunters from as far away as Dover participating. Fox Hunts will continue through out the Winter with hunts on the Saturday following each SPARC meeting.

Many Public Service and RACES events have recently been successful. The Fall Camporee for the Southern Maryland District of Boy Scouts had over 1700 scouts attend. SPARC was a major contributor the events and demonstrations at the Camporee. Twelve on the air stations were set up to give demonstrations of HF SSB, HF CW, VHF FM and VHF packet. Four of those station were part of the Jamboree on the Air(JOTA) that scouts could communicate world wide with other JOTA stations.

RACES was activated several times in November and December. The first was the CALVEX exercise in which RACES members from Calvert and St. Mary's were activated to take part in the drill. RACES members were dispatched to mock mass care centers and both county EOCS. The second was the 1993 SET in which RACES members from Calvert and St. Mary's participated with members from Anne Arundel county in a drill that simulated an earthquake.

Meeting attendance is still on the rise with records being set just about every month. Members have been treated to an in depth technical discussion on doppler direction finding hardware and technique from Chuck Phillips / N4EZV, a hands on demonstration of the AEA IsoLoop and a discussion on Maritime mobile operations for Ray Rollins / KA3WID.



Operations were conducted in an ARES/RACES Net format. Members participating were: Doug-N3CWG, Rich-N3JIA, Mike-N3KTX, Dave-N3KOQ, Don-K3OZP, Bill-N3GWV, Jane-N3IXL, Andy-N3MCB, Larry-WX3F, Phil-KE3FL, Steve-N3SB, Wil-N3LEC, Bob-N3MBY, and Pete-N3MGB.

The Club mourns Ennis Royer-W3CDG who became a Silent Key. Ennis was one of the founders of the Carroll County Amateur Radio Club. Ennis — Elmer to many of the County's amateurs; Life member of the Carroll County Amateur Radio Club; and NCS of a 10 Meter net for many, many years, was also listed in the ARRL's Who's Who for 1934. His last wishes were to have members of the CCARC be active participants in his funeral. Such a fine person will be missed by all.

In May, CCARC members put on a special event station in support of the International Fair held at the New Windsor Service Center, New Windsor, MD. The station was set up in field day fashion. Using a tri-band dipole for 20, 17, and 15 meters placed in the trees, the station had set up two operating positions which included computers and ARRL literature to show and explain the international world of Amateur Radio. Also, there was a QRP station on 40 Meters. Participants in this event were: N3JIA, N3CWG, N3MCB, N3MBY, N3MBH, and KE3FL.

**FIELD DAY** — The Club put together its field day station at the Carroll County Emergency Operations Center grounds. Beam and wire antennas were set up for the Phone, CW, and Novice/Tech stations; as well as setting up Packet and Oscar 13/VHF stations. To nourish the works and operators for the event in a calm, social atmosphere, the Club had a family pot luck picnic Saturday evening.

The CARET was called to action again in July for the Cycle Across Maryland bicycle event. This event was the largest event that we had supported to date. There were in excess of 1400 cyclists involved in the event. From Catonsville to

Westminster, Maryland, the cyclist faced the hilliest leg of their week long trek. The CARET members set-up a portable station at the host location for the event at Western Maryland College. Our participation in this event was critical to the success of the event while in our county, and it exposed all of the CARET participants to near real emergency operations. Noticed by Jeff Katz, N3KZV, and the staff members of Cycle Across Maryland, was the calm and efficient manner in which net transmissions were made. There were two nets operated. One, on the Columbia 147.135 MHz repeater, and the other on the Westminster 145.41 MHz repeater. As the riders progressed westward during the day, net operations ended up on the Westminster repeater. The Club members received many great comments about the way in which assistance was benevolently provided all day long to the event. Thanks to: N3CWG, N3JIA, WX3F, WY3Y, N3NVH, N3NFE, N3SB, N3KOQ, and KA3RQQ.

September is FARfest month. Again this year, the CCARC put on the special event station "W3PRL". Operating for about four hours Saturday night and again Sunday during the FARfest, we had made about 200 QSO's. This year working at the station were: N3HYJ, N3JIA, N3MBY, N3KOQ, N3MAE, N3MCB, N3MGB, N3NFE, N3SB, NY3M, WX3F, and WZ3S.

October finds the Club involved in many more endeavors. A great crew turned out on Saturday the 9th to install hardline and an antenna at the repeater site in preparation for the Club's 6 meter repeater.

The Mason-Dixon Hamfest on October the 24th, next to field day, required participation by a great many of the CCARC members to have any success. We had great weather and a great turnout.

The CARET finds itself involved again this year. SET '93 was conducted on Saturday, November 20th. This Simulated Emergency Test (SET) was designed to assess the ability of the MDC section to implement and use the MDC Emergency Response Plan. The scenario was an

*Continued on next page*



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*Carroll - Continued from page 35*

which rendered the county's EOC useless. We set-up a field headquarters and provided a small mobile quick response team known as Special Communications and Operations Teams (SCOT). The SCOT team, being fully portable and self-sufficient, was capable of setting up where ever it was needed.

A work party went to the EOC to repair the Club's station antennas so we may compete in the November Sweepstakes. We had been challenged

by our Hanover, PA. friends of the Penn-Mar Radio Club (PMRC) to a friendly "Best-on-the-Border: Sweepstakes".

Also in November, members of the Club took another trip to the repeater site to put our 6 meter repeater on the air. Give it a try. K3PZN/R - 53.090 MHz.

We end the year (finally!) with the CCARC annual Christmas Holiday party.

That's it. Next year the CCARC may be involved in more new and exciting stuff, but most likely no less than this year.

I hope you have had an interesting HAM filled year, and your holiday is filled with peace and happiness.

Larry, WX3F



*Carroll County Amateur Radio Club members at FARFest '93 Special Event Station.*



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## Goddard Amateur Radio Club

- \* The Goddard Amateur Radio Club is the radio club for the NASA Goddard Space Flight Center in Greenbelt, MD.
- \* Meetings: held on the third Wednesday of every month at 5:00 p.m. at the club station which is located on Soil Conservation service Road, Gate 10. All amateurs are welcomed. You do not have to be an employee of Goddard to attend or be a member of the club.
- \* Repeater: 146.835 (-)
- \* Information, contact Jim Blackwell at 286-4534 or Vikki Gigante at (301) 249-2609.

It was a dark and stormy night ... no, that is the beginning to another story, but anyway, we have survived—the shuttle retransmission operators once again showed their steadfastness and magnificent capabilities to cover a fourteen day SAREX mission—and so when STS-58, SLS-2, touched down to a picture perfect landing on Monday, November 1, we were thrilled and exhausted, but we did it! Thanks guys and gals!

The next mission, on or about December 1, is one of particular relevance to many of us in the club. The Hubble Servicing Mission, STS-61, will be eleven days and many of our club members will not see daylight for many of those days since they are directly involved on the project. That's okay, we'll send cw messages from time to time to make sure you are all okay.

STS-60 comes up in January. This will once again be a SAREX mission. So, it never ends, it just keeps getting more and more exciting and busier and busier.

It was a pleasure to see all of you at the FARFEST and CARA hamfests. Thanks for your support and kind words to keep up the good work.

Our Holiday Party will be December 11 at the GEWA Recreation Center from 6-10 p.m. If you are interested in coming, please contact Vikki at

(301) 249-2609. Cost of the party will be \$12.00 and it will be an all you can eat steak dinner.

It looks as though the new shuttle retransmission trailer will be finished early next year. We brought up 10 meters during the last mission and it worked just fine. So, it looks like this is finally going to become a reality. If you see or talk to Bill Graettinger, W3IUI at any time, please give him kudos. He has singlehandedly spearheaded this effort for years and we owe him a debt of gratitude that we will never be able to express.

That's all for now from WA3NAN. We still have our shuttle frequency coffee mugs for sale. If you would like one, for \$5.00, contact Vikki at (301) 249-2609. They make great holiday presents! Have a very happy holiday!

Vikki, KA3PVS

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**TNX es 73 de Kevin, N2KXX - Pres.**



## Washington Metropolitan Area IBM Amateur Radio Club

- \* Meetings: First Tuesday of the month that is a work day, 5:45 p.m. - 7:00 p.m.
- \* Next Meeting: January 4, 1994 at 5:45 p.m.  
Building 182, Room 3C51 (The Radio Shack)  
(301) 240-6877
- \* Chat Net: Second Wednesday of each month,  
5:00 p.m. 145.520
- \* Packet: 145.610 MHz, running TCP/IP netcode  
(WA3YHE-1)
- \* Information: Erinn Tordella-N3HSA (301) 640-  
4286 The Radio Room (301) 240-6877

### R7 ANTENNA

Hopefully, by the time this edition of AUTO-CALL is published, the Cushcraft R7 vertical HF antenna recently acquired by the WMA IBM/ARA will have been installed! (Publication deadlines being a long-lead time item, the writer--not possessing that proverbial crystal ball--must necessarily hedge his/her bets....) As this article is being prepared, we have much progress to report. Thanks to the efforts of Reid Leslie and Chris Bernido at Main Site Facilities Engineering (with auxiliary support from Safety Engineering), approximately 4 feet of pipe has been connected to the handrail at 2 places with an additional support on top of a connection box (on the roof of Building 182). Following the completion of this task, Roel-N3FJJ, ARA Membership Chairman, inspected the work and reported that the structure appeared strong enough to support the new antenna, but recommended periodic re-checks of the mounting hardware to ensure continued structural integrity. Again, thanks to N3FJJ for being in the right place at the right time! (Frank-WA3YHE was out of town, and N3HSA is now working in Rockville, making roof visits un-handly.)

### MORE ON HF TRANSCEIVER REPAIRS

Last month we reported that the inoperative

ICOM IC-765 had been shipped back from the manufacturer in Washington State following repairs. As we were going to press, it became clear that the rig was still non-functional, according to ARA Treasurer and HF/CW Administrator, Bill-KX8I. After the regularly scheduled November Club meeting, Joe-K3LLL used some of the Club's test equipment to confirm that the problem was not related to a blown fuse (and thus something we could correct ourselves). ICOM has been contacted and once again has committed to diagnosing, repairing, and returning the HF transceiver at no additional charge to us.

### PLANNING ANOTHER HUNGRY HAMS BREAKFAST

Due to the timing of Christmas and New Year's holidays this season (both occurring on Saturday), the consensus of opinion seems to be that the next reasonable opportunity for the ARA to hold another 'Hungry Hams' Breakfast meeting (in lieu of the monthly Tuesday after-work meeting) might be in the late January (1/29) or early February (2/5) timeframe. After the success of the last breakfast meeting mid-year '93, it was agreed to poll our members and assess their interest in continuing this type of social event. Please look for further details in the ARA's online Newsletter, generously authored/edited by ARA Vice President, Frank-WA3YHE.

Happy New Year es '93...de  
Erinn - N3HSA, President

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## Sterling Park Amateur Radio Club

- \* Meetings: Third Monday of the month except December, July and August at Sterling Community Center Annex, Church Rd. (Rt. 625) near Route 28, Sterling
- \* Mailing: Call Box 599, Sterling, VA, 20167
- \* Information: Dick Maylott, W4LMJ, 430-3842  
Joe D'Angelo, WB2SAI, 444-1252

My apologies for absence of a Sterling Park ARC column for the past few months. I have been very busy getting accustomed to the managerial duties of the ARRL QSL Bureau which we sponsor.

As many of you know, Nancy Draheim, NK4U, retired from Fairfax County in October. She had originally planned to stay around the area until January, but, as the saying goes - she got an offer she couldn't refuse - on a house in suburban Atlanta. So, I wound up as Manager of the "Two letter prefix 4-call" Bureau in mid-October, as well as holding down my regular volunteer work as a letter manager. Thanks to the help of a number of club members, my job has now gotten a bit easier. Steve Harrison, KO0U, and Red Free, W3FTG, have assumed jobs as letter managers. The club members have assumed the "bulk sorting" work that Nancy and Jane Rhodes did for so many years. It has been a big job, and we even devoted one club meeting to cleaning out a temporary backlog. Apparently "Box 88" is back working again, and we're getting a lot of Russian cards in. Special thanks go to Ray Mullins, KD4RSL, Joe D'Angelo, WB2SAI, Floyd Martin, W4RW, and Allan Kaplan, W1AEL, for their extra help in the bulk sort work. We can still use more volunteers, so if you can afford to give some time to the distribution of QSL's, give me a call, or send me a message on the DX cluster.

On other matters, our October meeting was a contesting panel discussion with Red, W3FTG, Bill Rowlett, KC4ATU, and myself. Lots of questions

were generated by the members, and hopefully it will result in a few more club entries in the various contests. This followed our usual open house in September. December is one of the months that we don't meet, so we'll see you all in January.

73, Dick, W4LMJ

## Anne Arundel Radio Club

- \* Meetings: 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- \* On the Air: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz.
- \* Address: P.O. Box 308, Davidsonville, MD 21035
- \* Information: Margaret (Holly) Bevan, 301-923-0229

The members in attendance at the December 2nd Club meeting voted on the following slate of officers and directors to serve during 1994:

President:	Robert (Bob) Israel/WC3I
Vice Pres:	Dick McKelvie/KE3HQ
Secretary:	Barbara White/N30BU
Treasurer:	Bob Baltz/N3MNT
Directors:	Oscar Ramsey/NV3G
	Lew Hendrixson/N3IJK
	Charles Johnson/N3HFO

The new officials will be honored at the Installation Dinner on January 14th at Bay Ridge Inn in Annapolis. The dinner is held annually in lieu of the regular 3rd Thursday program meeting.

*Continued on next page*



## Quarter Century Wireless Association Shenandoah Chapter #137

- \* Meetings: Wednesdays of Alternate Months, 5:30 PM Social Hour (Dinner optional)(e.g. Jan, Mar, May, Jul, Sep, Nov) Location, Jimmy's Restaurant, Route 50 at intersection of I-81, Winchester, VA
- \* Information: Guy Black, W4PSJ, (703) 722-4952

Chapter #137 of the QCWA has met regularly on the third Wednesday evening of alternate months at Jimmy's Restaurant, Exit 313 of I81. Meetings start with a social hour at 5:30 PM, followed by dinner from the regular menu. Many XYL's and non-member guests are always present, and there are always programs. Subjects of the program have been packet radio, fibre optics technology, power systems engineering, antenna restrictions — a talk by ARRL general counsel Chris Imlay, N3AKD, and an account of adventures while contesting by ARRL's Roanoke Division Director, John Kanode, N4MM.

Officers for 1994 were elected at the November meeting: Nat De Gutz W2CXB from Hagerstown as President, Perry Crabill W3HQX as Vice President, and Guy Black, W4PSJ as secretary-treasurer, both of Winchester. The Chapter is actively seeking to expand its membership or just plain meeting attendance, particularly among the many QCWA members who do not belong to any Chapter.

The next dinner meeting will be Wednesday, January 19th 1994.

**Guy Black, W4PSJ, Secretary Treasurer**  
315 Woodside Lane  
Winchester, VA 22603  
703 722 4952

### Questions or Comments?

Send Them To:

Doug Allen, Editor  
8008 Shadow Oak Lane  
Pasadena, MD 21122

*AARC - Continued from page 39*

The AARC Novice Course for 1994 will begin on the first Saturday in February (Feb. 5, 1994). Classes will be held in the AARC Clubhouse each Saturday from 9:30 AM until 12 Noon. The course is free, but students will be responsible for obtaining the text book, "Now You're Talking". Anyone interested in taking the classes should register with Holly/N3BMB at (410) 923-0229 or with Tony/WA3YLO at (301) 262-1917.

Club members Bob Baltz/N3MNT and Henry Ward/N3GCE presented an interesting and informative program on Amateur Television at the November 18th club meeting. They discussed the basic components of an ATV station, as well as the integration and operation of the station. They had a live demonstration of a station in operation, with the aid of Heru Walmsley from BRATS.

If you are planning to attend First Night Annapolis, Tony/WA3YLO requests that you bring names, addresses and phone numbers of friends or relatives to the Club's Message Center in the Champion Real Estate Offices on Main Street. They will be happy to send your greetings anywhere in the U.S. or Canada.

At the AARC Clubhouse on November 13th Charlie Tiemeyer/W3RMD, Harlan Ray III/AA3FE and Mike Drew/K1BGT gave twenty-two exams to eleven persons. Nine tests were passed with 4 upgrades. Bob Baltz/N3MNT and Holly Bevan/N3BMB graded. Betty Tiemeyer/K3VRZ and Oscar Ramsey/NV3G registered. Nancy Alley/NT3Z was the coordinator. The next AARC test session will be held on January 8, 1994.

73, Holly/N3BMB

## Prince George's Wireless Association

- \* Meetings: First Working Tuesday of each Month, 7:30pm., American Red Cross Building, 6206 Belcrest Road, Hyattsville, MD 20782
- \* Club Station: K3CEZ
- \* Mailing: 4109 Kennedy Street, Hyattsville, MD 20781
- \* Information: Frank Holton, WA3ZMW, (301) 927-1245

PGWA participated in (SET) 93 which was a Simulated emergency Test designed to permit Section Level Leadership to assess our current state of readiness for a real emergency. Also the exercise was to test the ability of the MDC Emergency Response plan to implement maximum effectiveness in an Emergency-Like communications environment.

Since the Disaster of Hurricane Andrew in Florida last year, Communication Response Teams, concept, has proven to be extremely valuable. Since power lines, telephone communications and transportation access into these affected areas are shut down, portable power and simplex frequencies on VHF are all that could be left for contact.

Ares, Races and The National Traffic System were encouraged to take part in this SET. Which took place on Saturday, November 20, 1993 at 0900 to 1600. Simplex frequencies on VHF were encouraged to simulate the lack of repeater use in an actuality. Multiple County response was noted throughout Maryland.

W3SWD - Dan worked the Maryland Emergency Phone Net, MEPN, on 75 meters and handled 16 traffic messages on ARRL forms. KA3COT - Charles, monitored the Washington County, Hagerstown area. N3HLY - Ken, monitored the Anne Arundel County frequency and passes a few messages between stations. N3EYE - Larry, assisted with Technical Aspects. WA3ZMW - Frank, worked with the Club's computer printing up membership roster sheets and WB3FUL - John helped

in the exercise and brought over a box of electronic goodies.

Well! it's that time of the year again to make our New Year's resolutions. PGWA is looking for an exciting year with getting into Packet and other Club activities. Visitors are welcome to our monthly meetings on the first Tuesday of each month and Frank - WA3ZMW who brings videos each month to help make the meetings more enjoyable. Happy Holidays and 73's to all.

Ken Easton, N3HLY

## Green Mountain Repeater Association

- \* Meetings: Board of Directors, Last Monday of each Month.
- \* Repeaters: KD3VR, 146.61 (Cheverly) K3GXF, 146.88 (Greenbelt)
- \* Luncheon: First Saturday of each Month at the Fountain Cafe, in the Laurel Shopping Center Mall, U.S. Rt.1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30AM.
- \* Mailing: GMRA, P.O. Box 429, Riverdale, MD 20737
- \* Information: Boyd Nelson, KZ3Z (301) 434-0934

GMRA, it's Board of Directors and members would like to wish everyone a very Happy and Healthy New Year. Thinking along the lines of one of our favorite hobbies, Radio, we are looking forward to the continued uninterrupted use of our two user friendly repeaters, the 146.61 and the 146.88 machines.

The upkeep maintenance and any parts replacement is accomplished by the volunteer efforts of the Trustees and Directors. The funding and costs to do this work is possible through the dues and any donations of it's members. The present membership is near 150.

*Continued on next page*



## Vienna Wireless Society

- \* Meetings: 2nd and 4th Fridays of each month, 7:30 PM, Vienna Community Center, 120 Cherry Street, Vienna, VA
- \* Repeaters: K4HTA/R 146.085in/146.685 out, 443.375in/448.375 out
- \* Nets: Vienna Emergency Net every Thursday at 7:30 p.m. 146.085/146.685 - Pow Wow Net every night except meetings at 9:00 p.m. on 28.444, Slow Code every night except meetings at 8:30 p.m. 28.390 Mhz.
- \* Information: Brian Bayus - N1KCE, (703) 264-1180
- \* Training Classes: Paul Wilkins - AB4CY (703) 560-2779

At the VWS Membership Meeting held on November 12, 1993, Jorge Thevenet-KD4DGQ, Brian Bayus-N1KCE and Dick Barto-KD4DGV were elected to two year terms on the Board of Directors. Barry Bennecoff-KD4BK was appointed by the new Board to complete the remaining one year term of Mel Woods-KN4ZT, who found it necessary to resign for personal reasons and whose incisive input will be missed. Mark Murray-WX3H who is serving the second year of his term, rounds out the VWS Board of Directors complement for 1994.

Special thanks to retiring Board members: William "Mac" McClain-KC4IGS, Jim Parsons-WA4LTO, and Dave Rogers-N4JGQ for a job well done. We also wish to express our appreciation to immediate past President, Mark Murray, Vice President, John Markey-W2AAW and two term Treasurer, Ross Patterson-N4YYH for their fine service to VWS.

The program of improvement and enhancement of the VWS repeaters continues under the Chairmanship of Bernie Wimmers-KC4YMP with able and continuing assistance from Bill Steinbach-N9CG and many other "technical" consultants. Our repeaters are open to all and we hope that you will give them a try and check out the good work that

has been done.

VWS Members Dan Gropper-KC4OCG and Jorge Thevenet-KD4DGQ, continue the long tradition of VWS support and involvement in the NWS Skywarn Program of which we are quite proud. As the winter storm season approaches, they will, no doubt, make sure that we all keep antifreeze in the Jeep and the HT batteries charged.

*VWS - Continued on next page*

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Send Your Club Columns To:  
Doug Allen, Editor  
Auto-Call Magazine  
8008 Shadow Oak Lane  
Pasadena, MD 21122

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*GMRA - Continued from page 41*

The two Repeaters are over 20 years old and somewhere in the not too distant future, GMRA would like to be able to replace one of the machines with a better unit. Then, in case of a breakdown, one of the older units could be kept as a back-up. Recruiting of new members could help along these lines.

The 146.88 repeater had some nice updates in 1993. WSSC rebuilt the water tank top and installed a new antenna grid system. They moved the antenna on the opposite side closer to the repeater building. This provided two good features, one replacing the old hardline coax with new coax and fitting and two, reducing the length by 80 feet. All this has improved access for many of its users. The diplexer was also retuned and the driver stage was rebuilt along with a new driver tube socket which reduced hum and overall operation.

Resolutions are being made by many for this up-coming New Year and we as radio operators could make a few by using the repeaters thoughtfully by being more courteous and considerate of fellow operators. Recruit 3 new members and receive a GMRA membership free.

73's to all, Ken Easton, N3HLY

## Capital City Amateur Radio Society

- \* Meetings: 3rd Saturday of the month at 12 Noon (except July & August). Woodridge Public Library, 18th & Rhode Island Ave. NE, Washington, DC
- \* Repeater: 145.11/144.51 Mhz in NE Washington, DC. Auto-patch membership available.
- \* Weekly Nets: Computer Net: Monday at 8 PM on the repeater
- \* Packet Net: Tuesday at 8 PM on 145.53 MHz
- \* On-Air Meeting: Wednesday at 8 PM on the repeater
- \* RTTY Net: Thursday at 9 PM on the repeater (All amateurs are welcome to join in on any of these nets).
- \* Information: Chester R. Martin, W3EIL, (202) 529-9598, 1719 Franklin St. NE, Washington, DC 20018 - Leo J. Boberschmidt, KA3TGY or KA3TGY@N3BBF.MD.U.S.A.NA
- \* Training: Plater Campbell, N3DZQ, (202) 544-7810

HAPPY NEW YEAR 1994 to all CCARS members and their families.....

CCARS had several members participating in the ARRL Sweepstakes this year and it looks like Joe Saunders, K3UAL, has scored the highest. Way to go, Joe. Other CCARS members in the November Sweepstakes included Sharyn-KA3DOF, Gus-N3KTM, Shep-WB3KIC, Paul-KQ3X, Jack-KB3KI.

Several club members were traveling over the Thanksgiving holidays and several reported on the fun of having their HT's along. Going on a trip? Don't forget your HT and a copy of the ARRL Repeater Directory. This is a very easy way to make new friends along the way or to revisit friend met in previous years.

At the November meeting, Leo-KA3TGY was approved as Public Information Officer for the Club. If you have any news of your activities or of Club activities, PLEASE let Leo know about them.

CCARS is looking to have a technical session at each of the meetings and is looking for suggestions for this program. What do YOU want the Club to have? We've had a J-pole construction session in the past and are looking for specific projects. We are considering programs on grounding systems, soldering coax and connectors, etc. If you have any thing you would like to see, contact Club president Clem-K3UAM. Remember: the programs should be topics the members want but the Club officers need input from the members.

Let's all look forward to a full year of radio activity with the club.

73, Leo-KA3TGY

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*VWS - Continued from page 42*

Nancy Draheim-NK4U, our perennial WINTERFEST Chairperson and an energetic supporter of amateur radio activities in the area, has left us for the warmer climes of Georgia. She will be missed, but' it is our good fortune to have as her stalwart successor, Ross Patterson-N4YYH, who will keep all of us busy and focused between now and February 27th. We all look forward to the balmy weather and fine bargains which Ross has promised to provide.

The last VWS Membership Meeting of the year will be held at the Vienna Community Center at 7:30 PM, December 10th. All are invited to join us for the meeting the traditional Holiday party which follows, with special eatable treats being provided by Steve Karty-N4UHO, through the always appreciated efforts of Mrs. Karty.

In that spirit I wish to take the opportunity to extend on behalf of all of us at VWS, best wishes to you and yours for a Joyous Holiday season and a Happy New Year.

73, Brian, N1KCE



## Northern Virginia FM Association

- \* Meetings: 3 times per year (fall, Spring, Winter)
- \* Weekly Nets: NVFMA Net every Wednesday, 8:00pm local, 146.79 - ARES/Public Service Net, Every Sun., 9:00pm local, 146.91 - On Air Equip. Clinic, First Wed., 7:30 pm local, 146.91
- \* Repeaters: 2 Mtr.-146.79 & 146.91, 6 Mtr.-53.37, 70 cm - 444.75, 220 Mhz.- 224.10, 224.34, 1292.1 Mhz.
- \* Membership Info: Dan - KC4OCG (703) 281-2358
- \* Mailing Address: NVFMA, P.O. Box 486, McLean, VA 22101

The January NVFMA business and election meeting will be held at the Fairhill Elementary School on Chichester Rd. in Fairfax, VA on Thursday, January 27, 1994 at 7PM. The election of two directors is to be conducted at the meeting. Please try to be there to ensure a quorum for the meeting.

The NVFMA is pleased to report that the weather alert interface was installed on the 146.91-W4XG repeater in Tyson's Corner on Wednesday, November 24, 1993. When the National Weather Service (NWS) tone alerts a watch or warning on 162.55 MHz, the NWS alert tone will be received at the repeater site. Thereafter, for once a minute for the ten minutes after the NWS alert tone, the 146.91 repeater will transmit an audible alert tone followed by a message stating "CHECK FOR WEATHER ALERT". For the ten minutes after the NWS tone alert, all transmissions on the 146.91 repeater will have a CTCSS sub-audible tone with a frequency of 131.8 Hz.

This system should enable all transceivers with tone squelch features to become a weather alert radio by simply tuning the radio to 146.91 and setting the tone squelch for 131.8. The system is still in a test mode and may be modified in the future. It has already worked well during a number of recent NWS tone alerted watches and warnings.

Assuming it is not abused, one minute of NOAA weather radio may be accessed directly through the repeater by pressing DTMF keys "nine one." It may be stopped before the end of the one minute period by pressing a star or a pound key.

Much thanks to the entire technical activities group for work on the interface including Bob W4XG, Sam KM4OI and Dan KC4OCG, and numerous other amateurs who have helped with the set up and alignment of the system.

Dan KC4OCG

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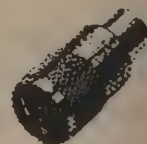
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FAX 301-490-6141

## National Capitol DX Association

- ✦ Meetings: Irregular, Contact the Secretary for information
- ✦ On-The-Air: Every Sunday at 8:30 p.m. on 147.00, All Are Welcome!
- ✦ Information: Rick Murphy - WA1SPT (703) 280-2637

### HAPPY NEW YEAR AND MUCH DX TO ALL

We've had a good past year and can look forward to some fine DXing in the months to come. The DXpedition to Peter I is scheduled for the first part of February with a good crew of experienced DXpeditioners. NCDXA has supported this activity and we all look forward to working the group.

It is also the time when the hamfests start coming along in serious number: the Frostfest in Richmond in January and the Winterfest in Vienna in February. Not a bad time to look around the shack to see what you need AND what you need to get rid of. Make room for all those new pieces of equipment that you just must have.

The NCDXA Field Check DX Hunt is progressing nicely. As of December 1, five members have worked over 200 of the "field-checkable" DX countries and one of these, John-N4MM, has worked 232. Dave-WC4B is at 198 and should pass the 200 mark soon. Remember, this club activity continues until 23:59:59 on February 28th. Still plenty of time to increase those totals.

February Meeting: the February meeting will be on Saturday, February 26th, the day before the Vienna Winterfest. Mark your calendars.

73 & Good DX, Leo, KA3TGY

**Auto-Call Magazine**  
**ONLY \$8.00 For 12 Issues**

## Rock Creek Amateur Radio Association

- ✦ Meetings: 3rd Friday of each month at 7:30 PM. VITRO Corp. Bldg #4, 13900 Connecticut Ave., Silver Spring, MD
- ✦ Repeater: W3RCN, 145.25/144.65 in Rockville, MD.
- ✦ Weekly Net: Monday at 8 PM on the repeater
- ✦ Alumni Net: Monday at 10:45 AM on 7.230 Mhz(+/- QRM)
- ✦ Luncheon: Each Wednesday at 11:00 AM at the Anchor Inn in Wheaton, MD
- ✦ Address: P.O. Box 1913, Silver Spring, MD 20915
- ✦ Information: Leo Boberschmidt - KA3TGY (301)946-3738 or KA3TGY@N3BBF.MD.USA.NA

### HAPPY RCARA NEW YEAR

With the New Year upon us, it is time for that hallowed tradition of "New Year's Resolutions." So, let us in RCARA consider the following resolutions:

I will attend more RCARA meetings.

I will participate more in the Monday night and Alumni Nets.

I will take an active part in Club activities.

I will send material to the Club secretary for use in Auto Call.

I will volunteer to help those in the Club who need help.

I will put together a demonstration for a Club meeting program.

I will \_\_\_\_\_ (each Club member fill in as each sees fit).

Notice that each of these resolutions starts with "I" and it is only with the participation of ALL of the "I's" in the Club that we can continue to be an active amateur radio club. Review your activities for the past year and see how you might change things and add to the Club. Look ahead to see what you want of RCARA and amateur radio for the coming year.

*Continued on next page*



## Maryland Emergency Phone Net

- \* Meetings: Nightly, 1800 Local, 3920 KHz
- \* Directors: KD3JK, NF3X, WA1QAA, K3ONU (Alternate)
- \* Manager: KK3F; Secretary: WA3YLO; Treasurer: KC3ZJ
- \* FAR Representatives: KC3ZJ, WA3FYZ

I'm sitting here stuffed after a good Thanksgiving dinner with the family, and thinking that in exactly one month we'll be doing it again for Christmas. Time is flying too fast; and there's oh, so much more to do! Today was an almost perfect day for this part of the woods, and while I was watching the Miami Dolphins play the Cowboys, in Dallas, in two inches of snow, I was even more thankful for my particular state in life .... I guess we all think about these things now and again .... and wax nostalgic when we have the luxury of same!

I missed last month's, deadline, or I would have mentioned that at least two members of our net have been awarded the 60 year pin by the QCWA, and that is a fantastic achievement. I wish we all meet at that level some day. Congratulations to Ross Reynolds, K3USO, and to Charlie Anderson, NF3X. It is readily apparent to those who hear them on the net that they KNOW amateur radio.

Our net secretary, WA3YLO, published his first newsletter, and it was a doozy! Thanks, Tony. Bob Bradt, K2EB, the manager for the Maryland Packet Traffic Net (MPTN), wrote a fine article on how the MEPN got started in packet, and how the NPTN evolved from that, and also gave a fine tutorial on how to use packet in message handling. If net members did not receive this issue, it probably means your address is not current in the rolls, so, you had better give Tony/WA3YLO a jingle, and get straight. By the way, dues are due. ,

Finally, let me report that last weekend (Nov 20) the MEPN participated in the national Simulated Emergency Test (SET), an annual event that

exercises the national traffic system "in extremum". This year the MEPN was the fulcrum upon which Maryland's Emergency Response Plan was activated. This involved the various regional two-meter nets, the ARES/RACES operators, and MEPN net controllers. Also participating were the three arms of MARS (Military Affiliate Radio Service), who gave MEPN very high marks for net discipline and efficiency. MARS participants were NNN0ASA (WIDV/3), the director of the worldwide Navy MARS program; WS3U, the director for Maryland of Army MARS; and KX3U, representing Air Force

*Continued on next page*

*RCARA - Continued from page 45*

Mike Kahn-KA3GSV had occasion to visit his daughter and grandson in Chicago recently and did a fine job of including ham radio in the visit. His daughter is a kindergarten teacher, so Mike arranged with some local hams to be on one of the repeaters one morning. Mike called one of his local hams friends that morning and then had each of the children give their name and say hello to the ham, using Mike's HT. When the ham came back, he greeted each of the kids by name; needless to say, the kids were impressed. No one had ever talked to them on the radio before. Mike brought along a simple code practice oscillator and Mike's daughter had each of the children's names spelled out on a card together with the Morse for each of the letters. She then had each of them spell out their names in Morse code. Now that's what I call promoting ham radio -- kudos to Mike and his daughter.

The November meeting featured a talk by club member and treasurer Mike Salapka, NQ3V. Mike gave a very fine talk on his experiences during his recent visit to Kazakhstan. No chance for ham radio activity for Mike, but certainly a fascinating adventure none the less. Imagine arriving at the airport after a LONG flight and having about 225 passengers unload their own baggage from the aircraft because there was no ground crew!! We hope to have Mike give us another installment of his trip during the coming year. Many thanks Mike.

73, Leo-KA3TGY@N3BBF.MD.USA.NA

## MADRAS

The Maryland Apple Dumpling Radio Amateur  
Society Inc.

- \* Meetings: 2nd and 4th Thursdays - 7:00 P.M.  
NBC Building - WKYS Conference Room 4001  
Nebraska Avenue, N.W. Washington, DC 20016
- \* Repeater: 444.100/449.100 MHz 145.45/144.85  
MHz
- \* Mailing: P.O. Box 2468, Wheaton, MD 20902
- \* Information: Hani AA3EI (202)223-3925 Larry  
N3GKZ or Jean - N3PLC (301)984-6112

### SCHEDULE OF EVENTS

January 13th and 27th speakers will be announced in the MADRAS Bulletin sent out the first week in January of 19-94.

A special thanks to those members who donated equipment to be sold at Ham Fests, with the proceeds going to the MADRAS treasury.

Congratulations and thanks are due to Hani Read - AA3EI who generously gave his time and effort to establish the MADRAS Newsletter. our first issue was a smashing success.

The Newsletter is sent out every two months. Anyone interested in receiving a copy can call Jean at (301), 984-6112.

We extend an invitation to all Hams to join us on our Net which meets the 1st and 3rd Thursdays of the month at 8:30 P.M. and every Thursday during the summer months. Not only do we discuss Club activities but we also relay information of interest to all Hams. Looking forward to seeing you on the net.

MADRAS extends congratulations to Paulo Teixeira - N3MGA, who was appointed ARES Assistant Emergency Coordinator for DC.

Looking for a Club that features Interesting Speakers, has exciting Special Events and a variety of knowledgeable members? Try MADRAS - we welcome new members.

Jean N3PLC

## Department of State ARC & Voice of America Amateur Radio Club

- \* Meetings: First working Monday of each month at 1200 Noon. Main State Department Bldg, Room 3524, Washington, DC
- \* Foreign Service Net: Every Sunday, 1500-1530Z on 14.316 1530-1600Z on 21.416 and 1600-1630Z on 28.416
- \* Repeater: W3DOS/R 145.19 MHz (open rpt), Round Table, Thursdays 2030L W3DOS/R located at 23rd & D Sts. N.W. Washington, D.C. DOSARC encourages repeater use for public service events in Washington area (e.g., Mall) and for general usage.
- \* Information: Department of State - John Swafford-W4HU (703) 536-9537 Voice of America - Dexter Anderson-W4KM (202) 619-2597 (Office)

The two clubs held elections in December, with the following results:

Department of State Amateur Radio Club - W3DOS (one-year term)

President: Thomas J. Warren, K3TW  
Vice President: Charles Signer, WA9INK  
Secretary: Philip W. Savitz, WA3GLA  
Treasurer: Warren H. Frayne, WD4IZM

*Continued on next page*

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*MEPN - Continued from page 46*

Mars for Maryland. And a special thanks to MEPN NCSs K2EB and K3ORW for two sessions each, and to K3CEZ/W3SWD and WB3JKV for the two middle sessions. Also to those MEPNers, and others, who checked in to handle traffic when appropriate.

Merry Christmas! and 73..... hope to see you soon..."on the air"

PUD/W3DQI



## Maryland Mobileers Amateur Radio Club

- \* Meetings: The First Friday of every Month at 7:30 PM. The location is the Office of Emergency Management at Crownsville State Hospital. Talk-in is available on 146.805 - 449.125 Mhz.
- \* Repeaters: WA3PJQ - 146.805 and 449.125 Mhz.
- \* Weekly Net: Mondays on 146.805 at 8:30 p.m.
- \* Address: M.M.A.R.C. P.O. Box 935, Severn, MD 21144-0935

OK, one more time. Here's what your brain gets to see if you go to the MMARC swap-fest on Jan. 30, at the Odenton Fire Hall. NEAT STUFF!! Here's what your brain gets to see if you don't go; \_\_\_\_\_ See you there I hope.

Well I hope everyone had a safe and enjoyable holiday season. Now all we have to do is keep the cabin fever from becoming epidemic until the Spring.

The MMARC Holiday party & meeting at Timbuktoo was another great one. Bob & Bonnie Anderson did another great job on providing the table decorations, the program, and a wonderful story about Scrooge McQRM. I can't wait until the movie rights are sold.

Congratulations to John Barbour/N3BTM on being awarded the Ham of the Year. The award is well deserved. John and I started in the same class two years ago, and in that time John has been very active in upgrading, public service events, special event stations, being elected to the Board, and besides all that he's an all around nice guy.

And another big winner at the Holiday party was Vicki Quesinberry/N3QFF. Vicki started off by winning the grand prize, a brand new Kenwood TH-28A handheld. And then she won the prize for being the newest ham present, and then she won the table decoration angel at her table! Her hus-

band Phil/N3OLS, said they were stopping on the way home to buy lottery tickets.

But I still think the biggest winners were all the club members who attended the party. The gift swapping and the friendships in the room made for a true holiday event.

Stay warm, keep the tubes and chips glowing, and see you at the swap-fest.

73, Bruce/N3BTM

## IMPORTANT NOTICE

**Effective Immediately**

### ALL CLUBS

All Clubs submitting columns to  
AUTO-CALL for publication are  
asked to send your  
CLUB HEADER

with your article. This will keep your  
Club Header up to date with the most  
current information.

You should include in your Headers:  
Club Name, Meetings, Nets, Repeaters,  
Address, Information Contact.

Thanks, Doug Allen - Editor  
Auto-Call Magazine

*VOA, DOS - Continued from page 47*

Voice of America Amateur Radio Club -  
K3VOA (two-year term)

President: E. Allen Brown, WA3FYZ  
Vice President: Hubert B. Katz, KB3TB  
Secretary: Stephen W. Bratcher, WE5X  
Treasurer: Dexter A. Anderson, W4KM

## Woodbridge Wireless

- \* Meetings: 2nd Tuesday of each Month, at 7:30 p.m., Canteberry Woods
- \* Repeater: WB4FQR/R 147.84/24 and 449.9/444.9 WB4GJZ/R 223.18/78
- \* Nets: Mondays, 8:00 p.m. local (0100 UTC) linked for the net.) Wednesdays, Slow CW at 8:00 p.m. 21.164 Mhz. Saturdays 9:00 p.m. - in new 10 Meter Novice band 28.460 Mhz. SSB
- \* Mailing Address: P.O. Box 112, Woodbridge, VA 22194

At the October meeting the Woodbridge Wireless elected a new slate of officers for '94. They are: President—Ed Quinto, KD4KBT; VP—Bill O'Mara, WB4RMJ; Secretary—Jim Duffer, WD4AIR; Treasurer—Ed Bayne, N4LJZ; Activities—Bob Tyson, KD4PUR. The Board of Directors includes Stu Mitchel, WA0DYJ; Loyd Davis, K8EI; and Jim Neff, WJ4M. Congratulations and best wishes for the next year.

A check of the last QST reveals our Field Day effort netted a 1st place in 8A. That caps off an event that was fun and a well-attended club activity. WWI has a pretty good Field Day plan, one we repeat each year. Practice makes perfect...but good propagation and good antennas help a lot too.

The club again provided communications help for the Head of the Occoquan rowing race. This Fall event is either a wrap-up of the year's rowing activity or a prelude to April's schedule...however you view it. Bob, NQ4K, Michelle, N4UBM, Loyd, K8EI and other WWI-ers have been regulars. They'll be needing help this Spring.

The Boy Scouts Jamboree on the Air (JOTA) provided another opportunity for WWI-ers. Denis, WD4KXB; Cliff, KO4FM; Mike, KA4RRU; Brad, KE4BUX; Tom, AC4XT; Bob, KD4PUR and Kurt, K5JJX organized the day's activities aided by scouts Ross, KE4BUY and Phil, KE4EVB. Ross and Phil participated in last year's JOTA and earned their ham licenses during the ensuing year. The activity

included two HF stations and one VHF station. The bands were open throughout the US and to Europe and Russia. The 23 scouts who attended worked on their Radio merit badges by making contacts and building a code oscillator from scratch. Hopefully we'll see a new crop of Scout Amateurs for the next JOTA.

The emergency vehicle has been painted (it's white and is lovingly referred to as the big, mobile refrigerator). Saturday the 6th of October is a work day to start on the interior.

The October meeting will see the budget discussed. The vehicle has added some expenses to our usual annual costs and a dues increase is being considered. However...a quick count of regular repeater users who don't support the club reveals that the normal dues would more than pay for the increase if all WWI repeater regulars supported the club.

The Holiday Party Committee reports only 2 tickets remain for the party December 4th at the Pilot House Restaurant. The party is usually the site of the December monthly meeting...the second Tuesday in December meeting is dispensed with.

Well, that's it from Eastern Prince William County. Remember to support your local repeater group. Those things don't keep going for free and your help will be greatly appreciated.

73 de WJ4M

## AUTO-CALL MAGAZINE DEADLINE

The Deadline for submissions to Auto-Call Magazine is the 5th of the Month prior to the Month of Publication (i.e. The Deadline for the February 1994 issue is January 5th, 1994.)



## Laurel Amateur Radio Club

### A Volunteer Examiner Coordinator

- \* Meetings: 4th Wednesday of each month (except November & December) 8:00 p.m. at the Laurel Armory, Murphy and Anderson Community Center on the corner of 5th and Montgomery Streets, Laurel, Maryland.
- \* Social: 2nd Wednesday of each month except December. (Call for directions.)
- \* Nets: 1st & 3rd & 5th Wednesdays, 8:30 p.m. on 147.225 +600, no tones.
- \* Mail: P.O. Box 3039, Laurel, MD 20709-0039
- \* Exams: 3rd Saturday of each month, 10:00 a.m. at Maryland Radio Center.
- \* Information: Jim-WI3N (301) 725-6829 or Pud-W3DQI at (301) 498-6293

*The Laurel Amateur Radio Club is active in the Laurel area, which we think generally includes most of Northern PG County, as well as the surrounding area in Howard, Montgomery, and Anne Arundel Counties. All Amateurs in "our neighborhood" are welcome to participate in LARC activities.*

The Laurel ARC mourns the passing of Jim Hoffman/N3JKC. A scholarship is being established in his memory with F.A.R. Checks may be made out to F.A.R. and should be directed to HD/N3LFL. His number in Forestville is (301) 420-3500.

The Laurel ARC will hold its customary spring class for the General Class License. The classes will cover the material found in the ARRL license manual. They will begin on Monday, February 28 and run each Monday through the end of April, culminating in an exam given by the Laurel VE team through the Laurel VEC. The exam by the Laurel VEC is free, as is the course. The class will be given at the Phelps Senior Citizen Center in classroom 1 from 7-9 p.m. For information and to register, please call Pud Reaver/W3DQI (301) 498-6293 or Jim Cross/WI3N (301) 725-6829.

Here are some statistics from the Laurel VEC operation. The Laurel VEC is one of the last hold-

outs who still doesn't charge applicants for taking tests. Nationally, the Laurel VEC administered 94 exam sessions. Laurel VE team administered 20 exam sessions to 833 persons who took 1,447 elements. The exam sessions ranged from regular monthly scheduled sessions to hamfests to sessions at the end of licensing classes. That is a lot of volunteer hours expended and these folks deserve a big thank you for continuing to keep the spirit of free testing alive. I would like to single out three individuals whose time and talent make our VEC successful. Howard/K3IOG for his tireless efforts at generating multiple tests for each element and for generating many code tapes; John/WB3GXW for his leadership of the Laurel VEC team, seeing that enough examiners and support people get to the right place at the right time; and Bob/WB3KXJ for seeing that all the paperwork is correct and gets to the FCC on time.

Since the last Laurel ARC appeared on these pages, we had a special event station that ran from the College Park Airport (the world's oldest continuously operating airport) November 13-14. We had announced the special event station in the ham magazines and worked almost 700 stations. We ran two HF rigs and one VHF on 2M. For those of you who worked us, if you send a SASE, you should be receiving a very nice certificate before Christmas. We had many of the membership participate in the set-up, operation, and tear-down of the station.

We're looking forward to another year of having fun at our regular public service functions, Field Day, and some illuminating speakers at our regular meetings on the fourth Wednesdays at the Laurel Armory Recreation Center. For more information please call Pud/W3DQI or Jim/WI3N listed above.

73's, Jim/WI3N

# HAPPY NEW YEAR

From the folks at Auto-Call Magazine



## Montgomery Amateur Radio Club

- \* Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD Park underground on G-2
- \* Repeater: 146.355 in (Rockville & Germantown) 146.995 out (Rockville)
- \* Mailing: M.A.R.C. P.O. box 611, Gaithersburg, MD 20884-0611
- \* Information: Jeff Horlick - KZ3F (301) 258-0112, Steve Todd - K2IYQ (301) 253-4172
- \* Training: Jane Rosenthal - AA3CQ (301) 762-6262, Dick Hayman - K3DML 340-8251

### THESE FOLKS GOT A HEAD START ON THE NEW YEAR

It seems that new year's resolutions have been a part of our culture longer than anyone can remember; perhaps this is the year you'll get that license upgrade you've been contemplating. Maybe 1994 is the year to buy that HF rig you've been dreaming about. Some members of the Montgomery Amateur Radio Club began building the momentum for a happy 1994 well before the old year ended.

Some 20 people got a head start on the new year in mid-November when MARC's education committee in conjunction with the Laurel VEC offered license exams at Gaithersburg High School. The exams were the culmination of MARC's fall classes which began in September. Would-be hams got a chance to qualify for their first callsigns while others qualified for license upgrades. Congratulations to MARC Member Ross Merlin, WA2WDT, who went home after the test with an extra class certificate of successful completion.

Ron Rubin, N3KQY, who co-chairs MARC's education committee with Jane Rosenthal, AA3CQ, says the committee has plans to expand its efforts in the new year. "We're planning a novice/tech class in April and a general theory class and 13 WPM CW class as well."

Rubin says the committee is considering implementation of "Saturday Morning Seminars," which, as the name implies, would allow hams with varying levels of experience to meet for some hands-on training opportunities. Rubin envisions the four-hour seminars will cover such topics as packet radio, Amtor, RTTY, an explanation and demonstration of TCP/IP, and some intensive theory.

## QST WOULDN'T BE AS GOOD WITHOUT THEM

ARC Members Harry Ricker, KC3MX, and Steve Todd, K2IYQ, began building momentum for a happy 1994 by enhancing the pages of "QST Magazine" with their contributions. Both pieces appeared in the November issue. Ricker's contribution dealt with troubleshooting your rig before sending it in for service, and Todd's input was part of a larger story on satellite stations in use during Field Day 1993.

### THEY RESOLVED TO FIND THE FOX

What do you call a cold afternoon with unpredicted rain sandwiched in the middle of several days of Indian Summer? A fox hunt! The hiding part of the fox team of Mark, N4SYK, and non-ham Alan were set to go with a dry-weather site nestled amongst the trees in the back woods of Wheaton Regional Park when start-site coordinator June, N4SYL, and fox cub Brian announced that it was beginning to rain.

Undaunted by the minor drizzle, the hunt went on as planned. The participants were: Team 1, Craig, N3NKD; Paul, N3PGO; and Aaron, N3NMT. Team 2 consisted of K3IVO and a team from Fort Meade which included Craig, WA3TID; Bill, N3DCI; and, non-ham Lynn. Team 3 included Erinn, N3HSA and Mark, NW3S in car 1 and Robert, N3LGC and Paul, N3HNC, and non-ham Kevin in car 2. By the time the first hunters found their way to the park, June, N4SYL, had come to the rescue with a tarp, large umbrella and heavier raincoat for the hidden TX crew. The half-watt signal emanating from a four-element cubicle quad at 15 feet was bouncing off every rain-soaked tree in the park, confusing the intrepid direction finders. After two hours and 25 minutes, the fox was discovered by team 1. Approximately 1/2 hour later, as the hunt neared its close, N3LGC of team 3 splashed down a trail to clinch second place, soon followed by fellow car-mates. (The remaining teammates were unaccounted for until everyone showed up for pizza at the Stained Glass Pub.

Increasing rain and disorientation took its toll. Team 2 showed up as the others were packing their gear. There's nothing like an extra challenge to make success that much sweeter. The weather certainly provided that challenge for the participants and made success even more appreciated when it was achieved. Look for upcoming information about a future MARC fox hunt.



## Fauquier Amateur Radio Association

- \* Meetings: Second Tuesday of each Month, 7:30 p.m. Local. Shadow Lawn Recreation Center, Warrenton, VA
- \* Net: Every Wednesday night at 9:00 p.m. Local, 147.165 rpt.
- \* Packet: N4YXW-1 full service BBS in Warrenton, VA 145.090 Mhz. Chat Node: NET ROM compatible node FARA 145.070 Mhz.
- \* Repeater: NZ4N/R 147.165 Mhz. out; 147.765 Mhz. in
- \* Information: Neil-AB4YK (703) 364-3861

Fauquier's hams were treated to a fascinating presentation by US Coastguard LCDR Dubay on the subject of Global Positioning system at the November monthly meeting. While the system is not complete, it is still able to give positioning to 100 meters with relatively modest equipment. The system, when it is finally in full operation will have 4 satellites in each of 6 orbits. The USAF Space Command in Colorado controls the ultimate accuracy code information that can give accurate positioning to a few meters. Possibly these codes could be available to the more general user. Ultimately, these types of systems will be able to give a horizontal accuracy of a meter and vertical accuracy of 2 meters just about anywhere on the earth's surface.

The GPS electronic BBS telephone number is 1 703 313 5910. It is operated out of the Coastguard's Alexandria facility. The GPS information center tel no is 1 703 313 5920.

The November meeting ended with club elections at which an unopposed slate was elected by acclamation. The elected slate of the officers who will take over in 1994 is: Neil Spokes, AB4YK, President; Larry Walker, K4LLQ, Vice President; Duffy Hearrell, KD6RNE, Secretary; and George Murphy, W4KOJ, Treasurer. I thank the club members for re-electing me and congratulate my colleagues on their election. I look forward to FARA having as good a year in 1994 as we had in 1993.

Season's greetings to all. Neil, AB4YK.

## Tri-County Amateur Radio Club

- \* Meetings: Semi-Annual Business meetings, Time and Date announced on the air and in Club Newsletter.
- \* Repeater: KA3LAO/R 147.18+
- \* On-The-Air Net: Tuesday at 1930; Amateur Radio News Line Tuesday at 1915.
- \* Mailing: P.O. Box 10592, Silver Spring, MD, 20914

The officers and members of the Tri-County Amateur Radio Club hope that your holidays were peaceful and enjoyable.

As you will recall from our previous articles, the 18 machine has a total of six receiver sites: Ashton, Bowie, NorthWest Washington, Andrews Air Force Base, Damascus, and Seat Pleasant. Those of you around Andrews probably know by now that the receiver located there has been out of service for a while. Repairs are expected to be completed soon. At this time all receiver sites except NorthWest Washington and Andrews Air Force Base are tone encoded. Be aware that the control operators will activate full tone encoding whenever annoying signals affect the machine.

**Heard On The Repeater:** This feature of our report attempts to provide useful suggestions for efficient and effective use of the repeater:

° Recently a traveler requested assistance in placing a call through the autopatch. It took a while before someone responded. With the potential for bad weather this time of year, it would be helpful to keep an ear to the repeater to render any assistance that may be needed.

*Continued on next page*

## Southern Maryland Amateur Radio Club

- ✦ Meetings: 2nd Friday of each month at 1930 at the Church of the Nativity, 5203 Manchester Dr., Temple Hills, Maryland.
- ✦ Nets: Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 ( $\pm$  QRM); Thursday at 2000 on 28.447 USB.
- ✦ PG ARES: Wednesday at 2100 on 147.15+ Repeater. All are welcome to join.
- ✦ Repeater: W3PT/R 147.15+, Cheltenham, Md. Autopatch to 911.
- ✦ Mailing: P.O. Box 273, Cheltenham, Md, 20623
- ✦ Information: Vic & Linda Curtis, WA3YUV & KA3VNI (301) 888-1388

The officers and members of SMARC hope that you had a very enjoyable and safe holiday. After an exciting 1993 we are looking forward to even more adventures this coming year.

In case you happen to have missed all the excitement of the last election night, the following are the officers of SMARC for the coming year:

President	Allen Stevenson, KA3ZPA
Vice President	Edward Zumstein, WB6NCO
Secretary	Jennifer Creager, N3MDS
Treasurer	Richard Eshelman, WK3I
Activities	Larry Laffoon, N3CAM
Public Service	George Dewees, KA3KIF
Board of Directors	Ray Simpson, WI3A Vic Curtis, WA3YUV Tommy Lloyd, N3HBS

Our congratulations go to all the new officers and our best wishes they don't find out what they got themselves into.

The novice and codeless technician class recently finished their studies and the VE testing began. Eight out of the 13 who went into the testing session passed more than one element. Of the remaining, four passed one element and are currently

working hard to prepare for the next VE session to get their remaining elements towards a license.

As always, the SMARC Christmas party was a great success. Everyone there seemed to have had a good time. You may want to check with Ray, WI3A, sometime to see the "real" menu he had prepared for the party. Thanks to all of those who kept Ray busy while the actual menu was prepared!

*Continued on next page*

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*Tri-County - Continued from page 52*

° A couple of autopatch users have encountered problems activating the patch recently. In order for the controller to recognize your access code and number you are dialing, you need to firmly depress the appropriate button so a clear tone is generated. Hitting two keys, having a tone that is too short, or keying too fast could introduce errors. If you dial a number and hear two beeps instead of a ring, then you have tried to call a number that is not permitted through the machine.

° Remember that it is good practice to pause a moment between transmissions in order to allow anyone with an emergency to put in a call.

Don't forget the Tri-County on-the-air net which meets each Tuesday at 1930 local. If you are listening at 1915 you will hear the latest NewsLine information, ARRL bulletins, ARRL propagation forecasts, and the latest exam schedules throughout the area. NewsLine is an amateur radio news service from California which always has information of interest to the amateur community.

As we begin a new year let us make a resolution to make sure we are prepared for any emergency by maintaining our equipment and continually improving our operating skills.

Have a safe and careful month.

Greg - WA3FSC

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Have you noticed that the repeater coverage has significantly improved lately? Did you know that you can hit the machine from 395 and the beltway in Virginia with an HT? All of this was brought about through the concerted efforts of our antenna repair team. As you know the repeater is located at Cheltenham Communications Facility with the antenna on top of one of their main communication towers. A trip to the top of that thing is not for the faint of heart. This hardy group of daring technical experts took on the task of initiating the much needed antenna repairs. As we can all see, their efforts have paid off. Who are these daring souls? The Repeater Committee Chairman was Allen, KA3ZPA who had his technical team consisting of Vic, WA3YUV, and Tommy, N3HBS, along with the antenna team of Mike Cizek, KO7V and Don Darby, KA3VNE. We can't forget the control operator, Al Abercrombie, W2GJS, who helped on the ground crew and provided much needed moral support. Our thanks go to each of these guys for their fine efforts.

The SMARC technical team was not happy just sitting around after doing all that work with the repeater so they asked Santa for help with a new project. As always, he came through along with a little help from some of his special helpers. Sometime after the first of the year you can look for a new SMARC repeater on 440. Vic, WA3YUV, will be the repeater trustee for our new 100 watt Motorola repeater on 443.600+. We will be anxious to hear from you about this new capability.

1994 is going to be an exciting year for SMARC members. The Prince Georges County RACES group will be holding their on-the-air net on Wednesday nights at 2100 local (9:00 P.M. for the rest of you), except for the fourth one when they have an eyeball meeting. This net is new to the 15 machine and is open to all amateurs. You do not have to be a member of RACES to participate. It is a great opportunity to learn a little more about message handling and emergency communications. Make it a point to join us on Wednesdays.

But this is not all the exciting things that are planned for this year, but you will have to wait for subsequent reports to hear about them! Be careful as the nasty weather moves in and we will see you on the nets and right here next month.

73, Greg - WA3FSC

## **We Need Your Club's News**

**Send your Club Column to:**

**Auto-Call Magazine  
8008 Shadow Oak Lane  
Pasadena, MD 21122**

When sending your Column, please include your Club Header. This will keep our information current and up to date.

**or you can upload your  
Club column to the:**

**MAPS-NET BBS  
(410) 239-4247**

When uploading your file to the BBS you must give a description of the file to upload. The description should include your Club Name and should say Auto-Call and the month.

The name of your Club should be used for your filename. I receive many files with the same name so by using your Club name this should eliminate any problems.

Example: MMARC.TXT not  
AUTOCALL.TXT

# Auto-Call Word Search

C I E W U X F R F W H T H K F H Q Y J  
 W M A U T O C A L L H T S E R A G I K  
 K Q R Z Q R D N Q F E B M E E L R O N  
 U U R Z B O O F T C B K W G F H B X J  
 W A L K O V L P H T S K Y W A R N E N  
 R R V W J F A N E V U R F M M W A J V  
 P T N F F X I N P R I A F I C C P F O  
 R E N R O C S R E M L E C O Z A P U W  
 K R Y S I P C L U I S R M R H N M O B  
 E W Q A A H O H N T O I R A L T D K Y  
 Y A N M E P F C I P N E N A E E H D T  
 E V M X I S O M H G T D R W C N Y Y S  
 R E P D Q P U O E U H E T N I N U A D  
 R P H X P Z N V P E N L A M V A J J Y  
 C T E D V E E M L E S V I P O E H Y T  
 Z X U X I N O D G M D E W G N B C G B  
 G M P D T C S E L A S K C A H S I A Y  
 A C Z S X R O Y P E G N J A R T J L S  
 X P Q D S X A M O B K D W V R N S B E

ADVANCED  
 ALINCO  
 ANTENNA  
 ARES  
 ARRL  
 ARRLREPORT  
 AUTOCALL  
 BEAM  
 COMING EVENTS  
 COMPUTER  
 CW

DIPOLE  
 DX  
 DXDXDX  
 ELMERSCORNER  
 EXTRA  
 FAR  
 FARFEST  
 FCCHIGHLIGHTS  
 FM  
 GENERAL  
 HAMFEST

HANDHELD  
 HF  
 ICOM  
 KENWOOD  
 KEYER  
 MAPSNETBBS  
 MICROPHONE  
 MOBILE  
 NOVICE  
 QUARTERWAVE  
 RACES

SHACKSALES  
 SKYWARN  
 TECHNICIAN  
 UHF  
 VEC  
 VHF  
 YAESU



## Widow's Assistance Program

The Foundation's Widow's Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in an Amateur's estate. Listings of Estate Sales are carried in the Shack Sales of Auto-Call magazine free of charge, and major items may be offered for sale at local hamfests, etc. No fee or commission is charged the families.


One other option that should be considered is donating equipment to a club taking a tax write-off for the charitable contribution. The Widow's Assistance Program can help you find a club that will make good use of the equipment. Some commercial operations are also willing to purchase the complete list of equipment and clear everything out at once. This may be the quickest solution in disposing of an estate.

Every ham is encouraged to maintain a list of his/her radio equipment, with realistic evaluations, and instructions on the disposition of any specific items you would like to have go to a special person or organization. Keep your family advised of your wishes.


For more information about the Widow's Assistance Program contact any local Foundation member club or call (301) 262-1917.

# The R.F. Connection


*"SPECIALISTS IN RF CONNECTORS AND COAX"*




RIGHT ANGLE ADAPTER  
UG-108BU




RECEPTACLE  
UG-58AU




HOOD  
UG-108U




PLUG  
UG-88BU




TEE ADAPTER  
UG-28AU



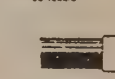
STRAIGHT ADAPTER  
PL-258



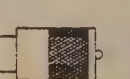
BULKHEAD JACK  
UG-62AU




RIGHT ANGLE RECEPTACLE  
UG-109AU




PLUG  
UG-216U




RCA




STRAIGHT ADAPTER  
UG-57BU




TEE ADAPTER  
UG-274BU




STRAIGHT ADAPTER  
UG-91AU




RECEPTACLE  
DOW-KEY 201



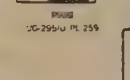
STRAIGHT ADAPTER  
UG-491U



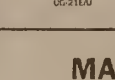
PLUG  
UG-216U WITH UG-175U  
REDUCING ADAPTER



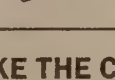
RIGHT ANGLE ADAPTER  
UG-27CU



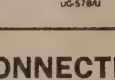
BULKHEAD JACK  
UG-62AU



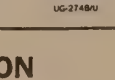
RECEPTACLE  
UG-296U SO-239



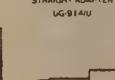
HOOD  
UG-366U




TEE ADAPTER  
UG-107DU




BULKHEAD ADAPTER  
UG-492DU



RECEPTACLE  
UG-290U



HOOD  
MG-387U



RIGHT ANGLE ADAPTER  
UG-68AU

**MAKE THE CONNECTION**

**The R.F. Connection**  
 213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877  
 301-840-5477

**G AND G ELECTRONICS**  
OF MARYLAND

**8524 DAKOTA DRIVE, GAITHERSBURG, MD. 20877**

**WANTED**  
for  
**CASH**

**Ham Gear: Transmitters, Receivers, Accessories**  
**Test Equipment of all Kinds**  
**Junque Boxes**

**Turn that unwanted gear into instant cash. No lot too large and no lot too small. Call for an appointment, today!**

**We also Buy:**  
**Industrial Surplus Test Equipment**  
**BIRD Meters and accessories**  
**Electronics of all kinds**  
**Ham Magazines and Technical books**

**Call G & G for a fast quote on your equipment**  
**Consignments accepted, too!**

**Trades accepted on equipment in stock**

**SEE OUR HUGE PARTS INVENTORY**

**MONDAY & TUESDAY, 11 AM to 9 PM**  
**WEDNESDAY, 11 AM to 5 PM and by APPOINTMENT**  
**301-258-7373**



# Shack Sales

Non-commercial advertising of Amateur associated equipment is available to subscribers of AUTO-CALL at a rate of 3 cents per word - with a \$1.00 minimum. Commercial vendors and non-subscribers rate is 17 cents per word - with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

Estate sales for Widows assistance handled by a FAR club will be published without cost.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Ads that will be running for longer than 1 month must be accompanied by a letter stating the length that the ad is to be run. Since no effort is made to investigate advertisers, no warranty can be applied.

**ALL ADVERTISING & SHACK SALES - COMMERCIAL AND NON-COMMERCIAL  
SHOULD BE SENT TO:**

**Doug Allen, Auto-Call Editor  
8008 Shadow Oak Lane  
Pasadena, MD 21122  
(410) 437-6258**

Copy **MUST** be received by the 5th of the month prior to the month of publication.

**FOR SALE:** Heathkit Model HD-15 Phone  
Patch..... \$25  
Dogocom DG-146A 2-meter HT with desk  
charger..... \$25  
Hewlwt-Packard HP650A Test Ocillator, 10 Hz  
to 10 MHz..... \$25  
Joe, W4LBL (703) 273-5314

## WANTED

Antique Electronic Radio Tubes  
Big Old Loudspeakers  
Tube Hi-Fi Amplifiers  
Audio Input-Output Transformers  
Electronic Audio Books and Magazines  
Call: (703) 573-8142, Vernon Vogt

## DAVE'S TOWER SERVICE

In need of Antenna or Tower Work ?  
Installations, Upgrades &  
Removal of Antennas and Towers  
Dave Hixon - N3EJT  
(301) 474-7405

**WANTED:** Quote on Collins KWM1, KWM2 or  
KWM2A, Wanted Dummy load to handle 3500  
watt output.

**FOR SALE:** Type 813 Tubes ..... \$15ea.  
M. Levy, W5QJT 2310 Den Mark #62,  
Clearwater, Florida 34623

**FOR SALE:** 5 foot roof towers ..... \$20ea.  
Mosley MP-33 with 40 meter adaptor (adapter new  
in box) with instructions ..... \$150.  
AVCOM COM 3R Satellite TV Receiver (C-band,  
special INTELSAT model) ..... \$175.  
Drake ESR 324 Satellite TV Receiver ..... \$25.  
Cushcraft A-4S beam with 40 meter adapter (ex-  
9Q5EE)..... \$175.  
Glen Martin Engineering Tower: three 7-1/2 foot  
aluminum sections with HAZER, nice  
condition ..... \$400.  
100 to 150 feet of 3/4 inch hard line (connectors  
may also be available)..... \$25.

**FOR SALE:** Drake TR7 - 3 Filters w/fan and PS-  
7 Heavy Duty Supply w/fan..... \$650  
WH-7 Watt Meter ..... \$85  
SP75 Speech Processor ..... \$85  
MS7 Speaker ..... \$25  
Dentron 160xv Transverter..... \$90  
Henry 2KD-3 Linear - Excellent with nearly new  
3-500's..... \$750  
Call Floyd Martin, W4RW - (703) 430-2499

**CONTINUED ON NEXT PAGE**

## **FOR SALE: Continued from page 58**

Info-Tech M-6000 multi-mode decoder .... \$375.  
Two SOLA 1000 kVA transformers..... \$250ea.  
Charles Signer, WA9INK, day phone (202) 647-0053 or FAX (202) 467-0053

**FOR SALE:** Hewlett Packard Laser Jet 500+ "true lazer" printer. .... \$275. OBO.  
Local area delivery only for this 94 pound excellent printer! Call John, K2VPR at THE CORRECT TELEPHONE NUMBER: (703) 866-3554 between 1700 and 2000 weekdays.

### **JWO SERVICES**

Discounts on All!

ARRL, AMECO, RSGB, CALLBOOK, W5YI, CQ, G. WEST, etc.

1994 CALLBOOKS. Your choice

INTERNATIONAL or NORTH AMERICAN,  
(List \$29.95) Only \$22.99 each, 10-up only  
\$22.25 each, mix or match. QRZ, CD ROM with  
U.S. and Canadian amateurs. A callbook on CD-  
ROM. With several other programs, too  
(List \$24.95) Only \$19.99

1994 ARRL HANDBOOK (List \$25) Only  
\$22.50, 10-up \$21.25

Complete line of ARRL, AMECO, W5YI and  
Gordon West Study Guides.

Also, CQ videos: Ham Radio Horizons; Getting  
Started in Amateur Satellites; Getting Started in  
Packet Radio; Getting Started in DXing; Getting  
Started in Contesting, (List \$19.95) Only  
\$18.25each.

W5YI Software: HAM OPERATOR SOFTWARE.  
Covers Novice through Extra and teaches code;  
with code tests through 20 WPM!

Includes FCC Rule Book. (List \$39.95) Only  
\$34.99. Only \$0.30 handling per order plus  
actual shipping cost. Special services for clubs  
and classes; call for details!

New! Gift Certificates Now Available; AnyValue.

### **JWO SERVICES**

12 Hickory Place                      Camp Hill, PA 17011  
Phone: (717) 731-4747      FAX: (717) 730-9373  
Worldwide Shipmentrs              Mastercard/Visa  
Daily to 10 p.m. and weekend afternoons

## **DISCOUNT PRICES AT RT ELECTRONICS**

10/11 Meter Radios, Antennas, Scanners, Power  
Supplies and More. Send or Call for a FREE  
FLYER - P.O. Box 2123 Warren, Ohio 44484 or  
Phone: (216) 369-1789 (8-4) EST, Fax: (216)  
847-0614

---

### **SLIDE RULES WANTED**

Buy or Trade for All Types

Bob Hill - NK3W

200 Agnes Lane, Linthicum, MD

Zip 21090-1702 (410) 789-4772

---

### **NORM'S ROTOR SERVICE**

Rebuilt Rotors, Parts & Service

Call Norm Jewler - K3LYW

Frederick, MD 21701

(301) 874-5885

---

**WANTED:** E.F. Johnson Viking Courier amplifier,  
Viking 500, Desk Kilowatt, Pacemaker, Ranger,  
Navigator, Mobile and Valiant transmitters. Will  
pick up. Also want HQ-100, HQ-145, HQ-160,  
HQ-180, Hammarlund speakers and other receivers.  
Bert, N8NN, 2150 Silentree Drive, Vienna, VA  
22182, (703) 448-8016

**WANTED:** COLOR MONITOR you no longer  
use. KB4QGJ, 524 North Quaker Lane, Alexandria,  
VA 22304-1827 Tel. (703) 370-1880

**WANTED:** Used Repeater in operational condition  
for new installation in popular Mid-Atlantic  
resort location. Contact Walt, N3OLY (302) 645-  
5553 or (800) 296-6847.

**FOR SALE:** Kenwood TS 830S; Eico Xcvt 730  
in working condition; Heathkit HW-9, QRP Trans-  
ceiver, All HF Bands less 160M w/HFT-9 & HM-  
9 QRP Wattmeter; Yaesu FL2100B Linear Amp;  
Atwater Kent Mod. 46, w/type F-4 Speaker-Mint  
Cond., Vibroplex Key J-36, 1942 ser. no. 811. Call  
Bill - W4LRD, (703) 536-5994

**Continued on next page**



**KB4QGJ Collects STEREO CAMERAS** (two lenses side by side) and related accessories with names such as Realist, Kodak, Revere; also collect Leica cameras and old antique fountain pens. Gerold Rose, 524 N. Quaker Lane, Alexandria, VA 22304-1827; (703) 370-1880

**FOR SALE: PARAGON** Transceiver, Ten-Tec, Like New, Excellent Condition, All Filters & Special EPROM. RS-232 Port, Pwr Supply, All SWL & General coverage, All Manuals ..... \$1,300.  
**ASTATIC** Silver Eagle "E" Mic. .... \$40.  
**Keyer & Paddle:** Logikey K-1, New ..... \$60.  
**Brass Racer** Iambic Paddle, New ..... \$30.  
**Call Mark,** WX3H of VWS (703) 570-0673 (H) or (202) 647-8101 (W)

**FOR SALE:** Collins 310-B1 Exciter (WE) \$150.  
 Collins 75A1 Rcvr (WE) ..... \$150.  
 Collins KWM-1 Transceiver includes 516 F2 AC Power Supply ..... \$550.  
 Collins 75S3 Rcvr (WE) ..... \$350.  
 Collins 32S1 Trans. .... \$200.  
 Collins 312B4 (WE) ..... \$100.  
 Collins 516F2 (WE) ..... \$150.  
 Collins 62S1 6 & 2 meter Transverter ..... \$600.  
 Hammerlund SP600 Rcvr ..... \$150.  
 Hammerlund SP600 Rcvr ..... \$100.  
 All Above in Working Condition, Contact - Warren Dean - KW3N (301) 373-5457

### MID-ATLANTIC ANTIQUE RADIO CLUB

Become a part of the country's fastest growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For a sample newsletter write to Joe Koester at 249 Spring Gap South, Laurel, MD 20707 - Phone (301) 725-4229

**WANTED:** Your Shack Sale Items could be listed here each month for just a few cents. Check out the advertizing rates in the back of Auto-Call Magazine. You'll find the best rates in town or call Doug Allen - Editor at (410) 437-6258 for more information.

**WORLD RADIO** - Amateur Radio's monthly newspaper can be delivered to your doorstep for only \$14 per year (\$24 overseas). Get the latest on how your fellow Amateurs use their hobby to help others. Regular features are Contest and Hamfest announcements, Aerials, Amateur Satellites, Continuous Wave, Digital Bus, DX World, Search & Rescue Communications, FCC Highlights, Mobile, New Products, Propagation, QCWA, QRP, Station appearance, Traffic, VE Exams, International News, Send your subscriptions to **WORLD RADIO**, 520 Calvados Ave. Sacramento, CA 95815

**THE AMATEUR RADIO NEWS SERVICE** is an organization of publishers and editors of Amateur Radio Newsletters and members engaged in public relations. Its purpose is to assist editors in anyway possible. For more information, write to Lee Knirko - W9MOL, Amateur Radio News Service, 833 Park Plaine, Park Ridge, IL 60067

### Your Ad Could Be Listed Here

For Just a few cents a month your shack sale items could be listed in this space.

### WORLDWIDE DISTRIBUTION



**Curtis Brown**  
 Manager  
 WB4KZL

14803 Build America Drive, Bldg B  
 Woodbridge, VA 22191  
 (703) 643-1063, 1-800-444-4799  
 Service (703) 494-8750

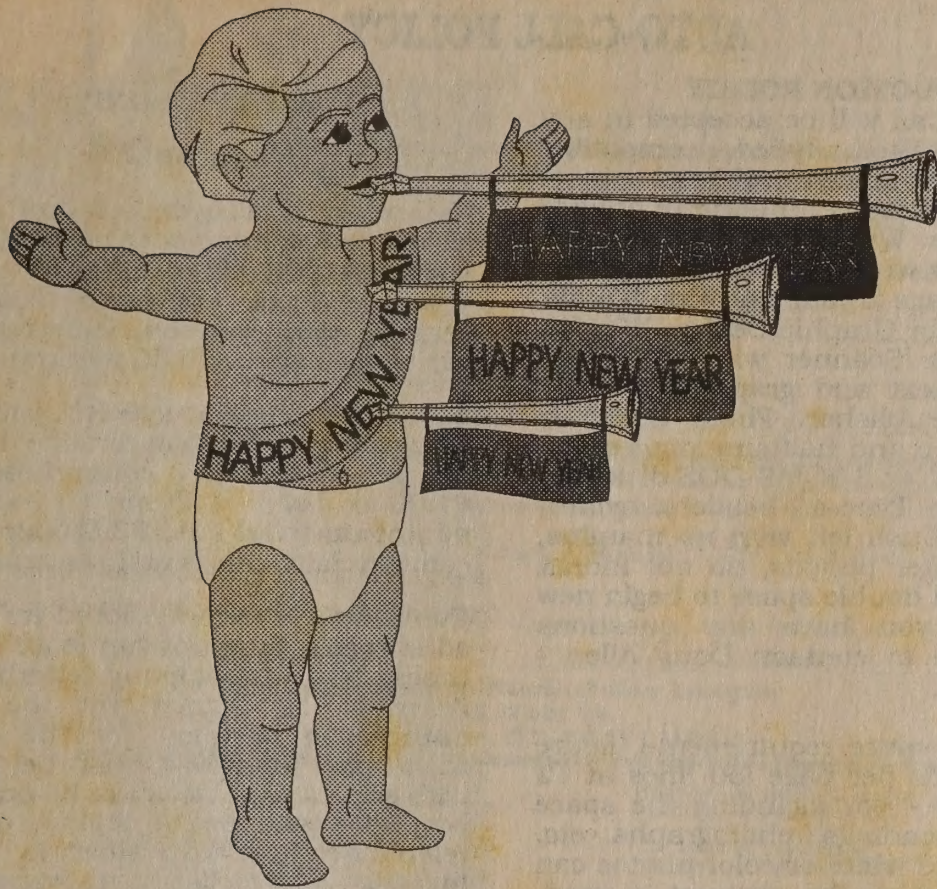
CALL TOLL FREE  
**(800) 444-4799**  
 Woodbridge, VA

**All Major Brands In-Stock**

CALL, WRITE OR STOP BY FOR  
 YOUR FREE 92 PAGE CATALOG







# HAPPY NEW YEAR

The Staff at Auto-Call Magazine  
would like to wish you a Happy  
and Prosperous 1994!



# AUTO-CALL POLICY

## PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is reformatted to preserve uniformity of style in the magazine. We use Word Perfect 5.1 for Windows for word processing, Ventura Publisher for page layout and CorelDRAW 3.0 - CD-ROM for Graphic Design. We also use a Full Page Scanner with WordScan OCR to scan text and graphic's directly into Ventura Publisher. Photo Styler is used to enhance and halftone images. We will accept 5.25" or 3.5" MS-DOS diskettes is ASCII format. Type all headers, bylines and body text flush left with no margins. Single space after periods, do not indent paragraphs and double space to begin new paragraph. If you have any questions please feel free to contact: Doug Allen - (410) 437-6258.

In determining space requirements, figure about 700 words per page (50 lines at 12 words per line) - not including the space taken up by headings, photographs, etc. Either black and white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary.

## SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the full name of the advertiser. If the full address is not included, we prefer to include the city along with the telephone number so that readers will know whether a long distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, please phone the Auto-Call editor at (410) 437-6258, Pasadena, MD.

## ADVERTISING

### SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscribers rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers

Commercial vendors should include the ad size and length of run (e.g., 1 year, 6 times, etc.) on company letterhead and it must be signed by the person authorizing payment for the ad. Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

### DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the shack sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be prepaid for at least the current month.

Page	Col.inch	Rates per Issue			
		1 Year	6 Times	3 Times	1 Time
Full	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2	9	55.00	65.00	71.00	75.00
1/3	6	40.00	46.00	51.00	54.00
1/4	4½	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	2¼	17.00	20.00	22.00	23.00
1/9	2	16.00	19.00	21.00	22.00
1/18	1	8.50	10.00	11.00	11.50

Based on camera-ready copy

Extra charge for halftoning photos  
and for in-house artwork and layout.

Copy must be received by the 5th of the month preceding publication date.

(e.g. Copy for November issue must be received by 5th October)

**All Advertising Must be Pre-paid**





# JOIN ARRL

## BENEFITS FOR YOU

QST, QSL Bureau Awards, Low Cost Insurance, Operating Aids,  
Government Liaison and More—Much More!

### MEMBERSHIP APPLICATION

NAME \_\_\_\_\_ CALL \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ PROV./STATE \_\_\_\_\_ PC/ZIP \_\_\_\_\_

\$30 in U.S. \$42 elsewhere (U.S. funds). Individuals age 65 and over, upon submitting one-time proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 21 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, DISCOVER # \_\_\_\_\_

Signature \_\_\_\_\_ Expires \_\_\_\_\_

**The American Radio Relay League**

**225 Main St.**

**Newington, CT. 06111 USA**

AUTO-CALL

Atlantic Division Director  
Hugh Turnbull, W3ABC  
6903 Rhode Island Avenue  
College Park, MD 20740  
Phone: (301) 927-1797

Roanoke Division Director  
John Kanode, N4MM  
Rt. 1, Box 73-A  
Boyce, VA 22620  
Phone: (703) 837-1340

## AUTO-CALL Magazine

P.O. Box 7612

Falls Church, VA 22040

Please enter my NEW \_\_\_\_\_ RENEWAL \_\_\_\_\_ GIFT \_\_\_\_\_ subscription to Auto-Call

For 1 Year \_\_\_\_\_ 2 Years \_\_\_\_\_

Subscription rate: \$8.00 per year.

**(Sample Copy of latest issue \$1.00)**  
will be applied to subscription

NAME \_\_\_\_\_ CALL \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

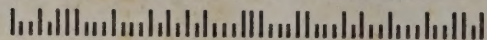
**Make check payable to the Foundation For Amateur Radio**



# January 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>HAPPY NEW YEAR</b>						<b>1</b> Green Mtn. Stafford
<b>2</b>	<b>3</b> Adams County Dept. of State IBM	<b>4</b> Antietam PG Wireless	<b>5</b> BARC MARC	<b>6</b> Anne Arundel MADRAS	<b>7</b> MD Mobileers Shenandoah	<b>8</b> Stafford
<b>9</b> MetroComm	<b>10</b> Carroll Cnty PVRC	<b>11</b> Fauquier Frederick Woodbridge	<b>12</b> ***FAR*** Pentagon S. Patuxent	<b>13</b> AMRAD MADRAS Mt. Vernon N. VA	<b>14</b> Alexandria SMARC Vienna	<b>15</b> Capitol City Stafford
<b>16</b> AMSAT	<b>17</b> Ole VA Hams Sterling Park	<b>18</b> Antietam Arlington BRATS	<b>19</b> BARC Goddard MARC QCWA #137	<b>20</b> Anne Arundel QCWA #20	<b>21</b> Rock Creek Shenandoah	<b>22</b> Stafford
<b>23</b>	<b>24</b>	<b>25</b> Columbia	<b>26</b> Laurel QCWA #20	<b>27</b>	<b>28</b> Central MD Vienna	<b>29</b>
<b>30</b>	<b>31</b>	<b>FAR MEETING</b> <b>January 12, 1994</b>				

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Address Correction Requested